1699

MADRAS DISTRICT MANUALS.

SOUTH CANARA.

[PRICE, 1 rupee 4 annas.]

I.

MADRAS DISTRICT MANUALS.

SOUTH CANARA.

COMPILED BY

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VOLUME I.

MADRAS:

PRINTED BY THE SUPERINTENDENT, GOVERNMENT PRESS.

1894.

PREFACE TO VOLUME I.

THE greater part of this volume was written in 1884–87, but for want of books of reference in South Canara, I was unable to take up the History chapter until I went on furlough to England in 1889–90. After my return to India, I found no time, amidst the pressure of other duties, to compile the statistical chapters, which had necessarily been left to the last, and in 1892 it was decided that Volume II, which is to be devoted to statistics, should be undertaken in connection with the revision of the other District Manuals, which is now in progress.

In the compilation of this portion of the Manual, I have had the advantage of the use of note-books left by the late Messrs. Hebbert and Spencer of the Madras Civil Service, who had successively been entrusted with the work, but neither of whom had been able to carry it through, and I take this opportunity of thanking the many officials and residents of South Canara who so willingly gave me any information I asked for, notably in connection with the chapter on The People. My special acknowledgments are due to Mr. J. C. Fernandez, B.A., M.L., now District Munsiff of Shiyali, who afforded me much assistance in the compilation and arrangement of materials for chapters I, IV and V. I have also freely availed myself of extracts from an article on Canara contributed to *Fraser's Magazine* by Mr. M. J. Walhouse, who was for many years District and Sessions Judge of Mangalore. The information in the chapter on Population has been largely added to by Mr. H. A. Stuart from notes taken for the Census of 1891.

Surgeon-Major W. A. Lee was kind enough to write for me a Medico-topographical and Statistical chapter, but under the scheme for the revised edition of the District Manuals this subject is to be dealt with in the second or statistical volume. I have consequently been unable to secure its appearance in this volume.

J. S.

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CANARA DISTRICT MANUAL.

CHAPTER I.

GENERAL DESCRIPTION OF THE DISTRICT.

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CHAP. I.
GENERAL DESCRIPTION.

Situation.

THE district of South Canara is situated on the western coast of India, half way between Bombay and Cape Comorin, and is the most northerly of the districts belonging to the Madras Presidency which occupy the western portion of the peninsula of India. It is a broken, low plateau or table-land, which spreads from the foot of the Western Ghauts of Mysore and Coorg to the sea and forms a long and narrow strip of country, cutting off the semi-independent state of Mysore from all communication with the coast. A few of the northernmost islands of the Laccadive group, known as the Amindívis, are also attached to the district.

Boundaries.

The district is bounded on the north by North Canara (Bombay Presidency), on the south by Malabar, on the east by Mysore and Coorg, and on the west by the Indian Ocean.

It is 150 miles in length, about 25 miles broad in its narrowest, and 50 miles in its widest part.

Latitude and longitude.

It lies between 12° 4′ 15″ and 13° 58′ 30″ north latitude and 74° 43′ 26″ and 75° 44′ 31″ east longitude. The latitude of Mangalore, the chief town of South Canara, is one of the two most important points in India. It is at the extreme end of the arc of parallel which crosses the peninsula of India in latitude 13° from Madras to Mangalore, passing through Bangalore midway.

This arc[1] is of special interest, because it is situated much nearer to the Equator than any similar arc that has been as yet measured on any part of the globe. Its length is 360 miles: old maps used to make the distance 400 miles, an important difference of 40 miles.

[1] Markham's *Great Trigonometrical Survey of India.*

AP. I.
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The name of the district, Canara, *Kannada* or *Karnáta* is derived according to Caldwell [2] from two old Dravidian words *kár*, black, and *nádu*, country, referring to the black cotton soil of the southern plateau of the Deccan where the early Canarese kingdoms were. Gradually the name Karnáta spread to all the countries under the domination of the rulers of Karnáta, and was corrupted into Kannada, whence the English name Canara, which is now confined to the western coast.

A more appropriate name might have been Tuluva, as the larger portion of the district is made up of the old country of Tuluva, which has a language of its own called Tulu. The northern portion, including the taluk of Coondapoor and part of Udipi, belonged to 'Haiga,' where, probably owing to its closer connection with the ruling Canarese-speaking people above the ghauts, Canarese is spoken by all Hindu castes, while Malayálam is the language of the portion of the district south of the Paiswani or Chandragiri river in the Kásaragód taluk, which only came under Canarese rule in comparatively recent times.

The name Haiga appears to be derived from the Canarese *Havu* and *Hai* (a corrupted form of the same word) meaning snake, so that Haiga or Haviga really means the land of snakes. This derivation is supported by the fact that the Canara coast was known in olden times as *Ahi-Kshétra*, a literal Sanskrit rendering of the Canarese Haiga or snake land.

The name Tuluva, in the opinion of some, is derived from a Tulu word meaning mild, humble, meek, and is supposed to denote the quiet and peaceful character of the inhabitants; but this is probably a mistake. The word 'Tulu,' meaning mild, is not in common use, and though the Tulu people are mild and peaceable, as a rule, they are not markedly more so than their neighbours, and there have been times when they have given trouble enough. According to the 'Kéralólpatti,' the name comes from that of one of the Perumáls of Kérala who fixed his residence in the northern portion of his dominions just before its separation from Kérala and who was called 'Tulubhan Perumál.'

divisions.

For administrative purposes, South Canara is divided into five taluks, viz., Coondapoor, Udipi, Mangalore (inclusive of the Amindívi Islands), Kásaragód and Uppinangadi. The taluks are further sub-divided into *Máganés* or collections of villages, and these again into *grámas* or villages, of which there are 1,277 in the district, including two towns.

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[2] Caldwell's *Dravidian Grammar*, Introduction, p. 34.

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Sub-divisions.

Taluk.	Area in square miles.	Population.	Designation and head-quarter station of Revenue Divisional Officers.
1. Mangalore	620	278,908	Assistant Collector (Mangalore).
2. Udipi	787	253,717	Head Assistant Collector (Coondapoor).
3. Coondapoor	512	120,268	
4. Kásaragód	1,032	280,659	General Duty Deputy Collector (Puttúr).
5. Uppinangadi	951	118,807	
Total ..	3,902	1,052,359	

To this must be added the four islands of the Amindívi group of the Laccadives with a population of 3,722 under a resident Sub-Magistrate.

North and South Canara formed one district under the Madras Government prior to the year 1860, when they were separated into the above-named two divisions. This separation was followed in 1862 by the transfer of North Canara, with the exception of the Coondapoor taluk, to the Presidency of Bombay on account of its close trade connection with the latter.

Coast Survey.

The coast line of South Canara commences a few miles south of Bhatkal in North Canara. The coast is indented by numerous creeks and bays formed by the estuaries of rivers, which, taking their rise among the hill ranges of the Western Ghauts, run from east to west and flow into the Arabian Sea. The coast line is low and sandy with broken and rugged rocks cropping up in places, but the country near the seaboard is well planted with cocoanut trees.

The coast has been surveyed by the Marine Department and the following results have been arrrived at:[3]

"Shirúr, in latitude 13° 56′ N., longitude 74° 35′ E., is now an "insignificant place, but its ruins point it out as having been once "a large town. It is the northernmost port under the Madras "Government. It is 3 or 4 miles south-east of Bhatcal in North "Canara and a little way to the east of Hadi Point. Hadi "Point is 5½ miles north-west by north of Beidoor Head. The "space between them is studded with dangerous rocks. One white "rock, just above water, bears south-west by south 2½ miles from "Hadi Point, and 2 miles south of the single rock are two white "rocks close together above water. Between these and Beidoor

[3] *Madras Manual of Administration*, vol. ii. app. xiii.

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"Head and south of that headland there are numerous others, "which, extending out to the depth of 7 fathoms water, make "this coast unsafe to approach under 10 fathoms. Beidoor river "and town are on the east side of Beidoor Head, which is a piece "of table-land jutting into the sea, and running back for some "distance inland. The river is only fit for small boats, and the "scattered rocks off it make it unsafe to approach. From the "Coondapoor Sandy Point, which is 3 miles north-west by north "of that river mouth, and was formerly called Barsalore Point, the "sandy coast runs north by west ¼ west 12 miles to Beidoor "Head; at 5 miles south of which there are some dangerous "rocks awash, in 6 and 7 fathoms at low water, situated 3 miles "from the shore. To the west and north-west of Beidoor are "other rocks in even deeper water, which render this part of the "coast dangerous, and it is prudent to give them a wide berth. "The land near this part of the coast shows in detached pieces of "table-land, most easily recognized as such in the morning, when "the mist hangs in the valleys. Scattered here and there are small "round hills of about equal height. The mountains of Bednore or "Nugger come close to the sea about here, being only 6 miles off, "and have some peaks more than 3,000 feet high; Yeljita Goodda, "the south one, 2,950 feet above the sea, is a sharp peak, at 7 "miles to east of Beidoor Head, and very conspicuous to a vessel "coming from the north. Barsalore Peak is a round mountain, "3,600 feet above, and 9 miles from the sea; but having the high "chain of the Bednore mountains for its base, does not show much "above them, except at a distance from land. Kollur Goodda, or "Codasahyádry Parwat, 4,400 feet above the level of the sea, is a "fine sugar-loaf peak, 17 miles north-east ½ north of Coondapoor. "It was styled by early navigators false Barsalore Peak, from the "fact of its being frequently mistaken for the peak of that name, "which is 8 miles further to the west-north-west and only visible at "a great distance from land; for other peaks, intervening between "it and the sea, hide Barsalore Peak, whereas Kollur Goodda "is distinct, being perfectly isolated, but it disappears behind the "others when bearing to the south of east. From Mangalore to "Coondapoor the whole coast is sandy, with cocoanut trees, with "the exception of Soortacull little rocky point, and the Caup bat-"tery rocks; at the back of the trees the hills rise gradually "towards the base of the mountains.

"Coondapoor river, in latitude 13° 38′ N., longitude 74° 39′ E., "lies to the south-south-east of Barsalore Point, and is 18 miles "north of Deria Bahaudur Ghur. It is now a place of consid-"erable trade. A reef of rocks, on which the sea breaks, lies "at 2 miles to the west of the river entrance. The rocks off it

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"afford a little shelter to small coasters from north-westers, but "these vessels generally run into the river at high water. At the "distance of 2 miles north-north-west of the entrance is a small "rocky point; and 1 mile further north-west is a sandy cape "(formerly called Barsalore Point), off both of which patches of "rocks extend into 5 fathoms water. This river is only navigable "by boats and small vessels; and the shore here should not be "approached under 9 fathoms in a large ship. Barcore, called "also Hangarkatta, is a small river port, about midway between "Coondapoor and Deria Bahaudur Ghur.

"The Saint Mary Isles extend from latitude 13° 27′ to 13° 20′ "N., the outermost of the range being 2½ miles distant from the "shore, with a channel with 2 and 3 fathoms irregular soundings "between them and the main, but safe only for boats. Some of "them may be seen 3 or 3½ leagues from the deck; the others are "low, nearly even with the water's edge. They are in one with "Barsalore Peak bearing north by east ½ east and some of "them are long, flat islets, particularly the southernmost. Deria "Bahaudur Ghur, in latitude 13° 20′ N., longitude 74° 41′ E., "about 18 miles to the south by east of Coondapoor, and bearing "north by east 8½ miles from Moolky Rocks, is the highest and "middle one of the three islands generally called Saint Mary "Isles, and its highest part is 70 feet above the sea. These islands "are basaltic, and in some parts have long grass and creepers. "The north, a separate island, which is nearly 3 miles north-north-"west of Deria Bahaudur Ghur, has cocoanut trees on it, and "water is obtainable by digging. There are rocks midway be-"tween these islands and scattered about to the north of them. "Rocks awash extend 1 mile to west of the cocoanut island, and "another patch at the distance of 2 miles north-west of it; whilst "to the north there are other rocks until abreast of Barcore river. "A ship should not approach this part under 8 fathoms by day in "working up the coast, or 12 fathoms by night; in running down "coast, it is prudent not to come under 15 fathoms. To small "coasting vessels excellent shelter is afforded from north-west "winds between Deria Bahaudur Ghur and the sandy shore "abreast; the passage in is close round the south end of these "three islands, and the anchorage is in 3 fathoms at lower water, "sand and mud bottom, with the highest part of Deria bearing "north-west. The sandy shore abreast of these isles is the point "of Malpe river, inside of which stands the little port of Udia-"war, not far from the town of Udipi, one of the German mis-"sionary stations, numerous along this coast.

"The Moolky or Primeira Rocks, in latitude 13° 12′ N., longi-"tude 74° 40′ E. (nearly 3 leagues to the south of Deria Bahaudur

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"Ghur), bear from Mangalore light-house north-north-west ½ "west 22 miles; they are situated 4 miles from the mainland, "are of black basalt, elevated in parts 40 feet above the sea, and "may be seen 9 or 10 miles from a ship's deck. On their east "side the bottom is sand and broken shells, which is not good "holding ground, otherwise a vessel in extremity might anchor to "leeward of them in a west gale. The channel between them and "the main is perfectly safe, but contracted to a breadth of 2 miles "on the north by the Caup Rocks, which are above and below "water, 3 miles to the north-east of the Primeira, and there is a "detached rock out in 4 fathoms 3 miles due east of them, off the "small hill of Utchila Goodda, which hill is on the shore 20 "miles north by west ½ west from Mangalore light-house. Caup "battery, 2 miles north by west of Utchila, is an old rock fortifi-"cation on the sandy shore, and from this the outermost Caup "Rocks bear west by north 1½ miles. There is an old temple, called "Coonajur Goodda, within a fort on an isolated hill, 280 feet high, "a good landmark, 4 miles north-east of Caup battery. At the "distance of 4 miles north by east from the Moolky Rocks, is a patch "of dangerous rocks awash; they lie out in 5 fathoms, with Coon-"jaur Goodda bearing east, and they are 1½ miles to the south-west "of a solitary black rock standing out of the water, midway between "Caup Rocks and the south islet of the Deria Bahaudur Ghur group.

"Mangalore, or Codiyaul Bunder, in latitude 12° 52′ N., "longitude 74° 49½′ E., is the chief town in the province of "Canara, and a place of large trade. The light-house is on high "ground, 1½ miles east-north-east of the river entrance, and 240 "feet above the sea. The town is very large, and on the north "and east side of the river, which is navigable for boats for many "miles up to Bantval, a large town. The bar has only 6 or "7 feet on it at low spring tides, so that only small vessels can "enter; Arab vessels of 150 tons manage to get in at high "springs, but the larger Buggalahs, which bring horses from the "Persian Gulf, are compelled to lie out in the roadstead. The "houses and trees on the elevated plateau by Mangalore light-"house unmistakably point it out. Barn Hill, 16 miles to south-"east of it, is also a good mark. The Ass's Ears, or Conijadacull, "17 miles north-east of Mangalore, is a rugged, double peaked "hill, of lime-stone, 1,100 feet above the sea, rising almost verti-"cally from the low country, but is in many views only just "visible from seaward above the tops of intervening flat hills. "Mount Hyder, or Kudre Mukh (the horse's face), 30 miles "north-east by east of Mangalore, is a magnificent peak, 6,000 "feet above the sea, abruptly terminating on the south, when "viewed from the west. It is the south-west extreme of the

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"Nugger, or Bednore district, of the province of Mysore, and "beyond it the ghauts recede much to the east; the hills at "the back of Mangalore are undulating, and separated from each "other by valleys through which rivers run from the mountains. "A fixed dioptric fourth order light on a white tower is exhibited "on the hill at the back of the town, at an elevation of 240 feet, "and may be seen in clear weather 14 miles, but in the hazy "weather of March and April only 10 or 11 miles. On the light-"house hill there are houses and trees, which form conspicuous "marks in the day-time. It is high water on full and change "between 10 and 11 hours; ordinary springs rise 6 feet, neaps 3 "and 4 feet. Night tides are higher than day tides in the fine "season. The most convenient anchorage for communicating "with the river is with the light-house east-north-east to north-"east in 4½ fathoms low water, muddy bottom. In case of a "north-wester (which breezes prevail here in the afternoon between "February and May), boats can conveniently come at high water "out of the Gurupura mouth, 2 miles north of the Mangalore "entrance. Approaching Mangalore from the north, caution is "necessary to avoid the Saint Mary Isles and Moolky Rocks, the "latter being in the line of 9 fathoms. It must also be remem-"bered that this is a projecting part of the coast. The bank on "which a ship may get soundings extends nearly 40 miles of "Mangalore; there being a depth of 10 fathoms at 10 miles "off shore, 20 fathoms at 10 miles, and 30 fathoms at 18 miles "all muddy bottom, between Mangalore and Mount Delly. "Above the latitude of Mangalore these depths are found much "further off shore. Abreast of Barcore and Coondapoor, 30 "fathoms, is found more than 30 miles from land, and soundings "of between 20 and 30 fathoms occupy a flat, 17 miles broad east "and west, between the latitudes of Saint Mary Isles and Pigeon "Island. At depths greater than 30 fathoms on this part of the "coast the bottom is generally sand or rock. Soortacull is a small "point with a temple on it, about 150 feet above the sea, bearing "north by west 9 miles from Mangalore river mouth. The inter-"mediate shore is straight, sandy, and well planted with cocoanut "trees. Moolky river entrance is 4 miles to north of Soortacull, "on the same bearing, and is nearly 10 miles to south-east of the "Primeira or Moolky Rocks. From Mangalore, the direction of "the coast is south-south-east, 18 leagues to Mount Delly; the "land near the sea is generally low and woody, particularly to "the south of Barn Hill, or Posody Goompey, which is a sloping "mount, nearly level on the summit, 1,000 feet high, situated a "little inland, in latitude 12° 40½′ N., longitude 75° 0′ E., and 5¼ "leagues distant on a south-east bearing from Mangalore. About

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"7 leagues to the south of this hill, at nearly an equal distance "from Mount Delly, 3 miles inland, stands another mount, in "latitude 12° 23′ N., 500 feet high, called Mount Formosa. "There are other hills farther from the sea, and 2,800 feet above the "level of the sea. In passing along this part of the coast there is "no danger, the depths decreasing regularly towards the shore to "7 or 8 fathoms, about 3 miles off. A ship in working may "stand into 7 or 8 fathoms, soft ground, when the weather is fine. "Between Mangalore and Békal, there are three considerable "streams—Manjéswar, Coombla, and Kásaragód—all reckoned "among the minor ports of Madras. The bars of these rivers "change every year, and a native pilot is necessary.

"Békal fort, in latitude 12° 23′ N., longitude 75° 1′ E., cover-"ing the whole extent of a small promontory 130 feet high, bears "from Delly little cape north-north-west 25 miles. There is a "travellers' bungalow among trees to the north of the fort. "Rather more than 1½ miles to north-west of this fort is a reef of "rocks, on which the sea breaks, having 4 fathoms close to it. "This reef is about ½ mile to the south-west of another little rocky "cape. The coast from Békal to Mangalore is all sand, fringed "with cocoanut trees, with the exception of the little rocky points "mentioned above. The land at the back rises gradually from "the sea, until at 5 miles distance there is a table-land nearly "400 feet high, intersected by rivers every 6th or 7th mile. To "east of Békal and Hosdroog, a spur of the ghauts, of considerable "elevation, reaches towards the coast. To the north of this the "highland recedes and is not often visible."

General appearance.

To convey a vivid impression of the general appearance of the country, it seems hardly possible to do better than transcribe the opening paragraphs of an article contributed some years ago to *Fraser's Magazine* by Mr. Walhouse, formerly District Judge of South Canara:

"It is difficult to imagine a wider contrast than exists between "the eastern and western coasts of the Indian peninsula. The "general aspect of the former is a long barren sandy shore, "stretching monotonously away till fading in the heat haze, and "only redeemed from utter dreariness by the heavy surf that "advances in three swelling lines, one after the other, each rising "higher, and hollowing its foamy crest more darkly as it nears "the beach, on which it bursts with a roar deeper and more sus-"tained than any heard by Homer. But there is no shade—no "refuge; the tropical sun beats burningly upon the treeless inter-"minable sand bank, and for mile after mile no rock or cliff "interrupts the sameness of barren beach and breaking water. "Very different is the western coast. From Cape Comorin

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"upwards it presents a continually varying panorama of grand or "picturesque scenery. Sometimes high ranges, rising far inland "and lifting their peaks and blue wavy outline above belts of cloud, "or sometimes approaching nearer, and disclosing their forests "and precipices, and throwing out spurs that dip their rocky feet "in the waves. Where the mountains retreat inland, a flat and "fertile region is left between them and the sea,—once doubtless "beneath the water; for as the ancients knew that Egypt was "the gift of Nile, so the natives regard this tract as won from the "sea, and say that the demigod Parashu Ráma asked the ocean "deity Varuna to give him land from his domain as far as he "could fling his *parashu* or battle axe. 'Be it so' was the answer; "on which the hero, standing by Nássick, hurled his axe 300 "miles from north to south, when the sea retreated from the "track over which it had fled, and the region termed Kérala was "left bare, now forming the sea-board territory of Travancore, "Malabar and Canara.

"To the ship sailing fast, the shore presents an ever varying "outline, generally a dark serried belt of cocoa-trees, whose roots "are washed by the waves, divided at frequent intervals by the "gleaming mouths of broad rivers. Rocky headlands, seldom "uncrowned with old fort or white pagoda, jut out, forming a "succession of winding bays where the long narrow fishing boats "are busy and the awkward looking *pattimars* or native vessels, "with their tilted sterns and sloping masts, are lying at anchor. "Now and then large towns can be discerned embowered amongst "cocoa groves and bananas; and farther inland knolls and tree-"clad eminences are dotted about, and beyond them long rolling "upland plains, bright green during the rains, whitening when "the grass is ripe, extend far away. For four months in the year "the south-west monsoon deluges all this region, and earth and "air are steeped in moisture. Hence, while trees are comparatively "rare and grateful objects on the other coast, here foliage abounds "and chequers the surface with green even during the hot dry "months, when vegetation is inconceivably burnt up. The soil of "all this country is principally laterite, a stiff deep red clay often "seamed with white and yellow layers; when exposed to the atmos-"phere, the surface, from the iron it contains, solidifies into black "rough rock; it can be dug out and cut into blocks, which soon "harden, and are the universally used and very durable building "material. Great masses of gneiss and granite are frequently "embedded in it, and, becoming denuded by time and weather, "crop up from the surface and strew the tops and sides of the hills "with fantastic boulders. A special feature in the aspect of the "country is a flatness uniform, yet infinitely diversified. Once it

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"was the floor of an ocean, but now worn and furrowed by "millenniums of monsoons into net-works of river basins, valleys "and hollows, varied with hills, ridges and elevated plains, all "flattened at the same general level, and bounded by abrupt wall-"like cliffs. While traversing any wide plain, one may suddenly "encounter a deep ravine, opening as it were beneath one's feet, "that, beginning with a mere gash in the surface, widens, as it "goes winding on, till it joins some broader valley. Under its "black craggy rims the upper slopes are studded with cashew-nut "trees, loaded in the hot season with large red and yellow apples "from the ends of which the edible nut curiously projects. "Beneath, amidst fallen blocks and an undergrowth bristling "with enormous thorns, the graceful climbing fern *Lygodium* "*scandens*, edged, like point lace with delicate seeding, twines "upward hop-fashion, and the splendid clusters of the *Gloriosa* "*superba* grow abundantly. Lower down, the sides of the ravine "are bordered with close set plantations of cocoa and areca nut trees, "interspersed with palmyras and Talipats lifting up the enormous "green fans of their leaves, and, stateliest of all the tribe, the "smooth-trunked sago palm raises high its head, whence droop "the long streamers of its quivering leaves and the immense "clusters of its grape-like seeds. Between the forest of tall slen-"der stems grow bananas, and pepper vines climb up anything "that gives support. Copious springs invariably issue from the "head of the ravine, and, as it widens out, rice plots begin to "occupy the level centre—first one, then two or three side by side, "then more as the area broadens, till a sheet of vivid green 100 "or 200 yards across stretches river-like between the palm-groves "and under cliffs of the ravine. Under the grateful shade of "those groves stand the homesteads of the owners of the rice tract "and gardens; low built and thickly thatched, with eaves slop-"ing down over the seat that runs along the outer wall, where "the family gathers after work. In front a smooth clean-swept "beaten floor, where grain is husked and winnowed, in the middle "of which stands a pedestal-like altar bearing a tulsi or sacred "sage plant. Dark glossy-haired girls and women classically "draped in blue brightly bordered garments are busy with house-"hold tasks; brown pretty black-eyed children run naked about, "and in the rice-grounds hard by, the good man, with his sons "and servants, is guiding the primitive plough, drawn by a pair "of sullen looking buffaloes, through the deep mud. With such "fertile hollows the surface of Canara is seamed; the description "of one suffices for the general features of all, but there is an "endless variety of picturesque likeness, just as no Devonshire "combe repeats another."

Mountains.

Speaking broadly the eastern boundary of the district is either the watershed or the scarp edge of the Western Ghauts, of which the peaks vary from 3,000 to 6,000 feet in height, while the general height of the range may be taken at 2,000 feet towards the north and 3,000 farther south. In the northern parts the range on its western side assumes, as a rule, the form of precipitous cliffs as far as the Bangadi valley to the east of the Kudre Mukh, the highest peak of the range and the sanitarium of the district, but to the south of this where the range is farther from the sea, it has more of the character of parallel ridges intersected by the deep valleys from which the most important of the Canara rivers take their rise. At the extreme south the range again approaches the sea, but in a broken irregular manner. From the ghauts spurs run downwards in all directions, one of the longest being the Chibbidri ridge which runs from Balálráya Drug to Dharmastala, a distance of about fifteen miles, intersected, however, at Chibbidri by one of the main affluents of the largest river in South Canara. A low running spur from the Kudre Mukh is somewhat peculiarly terminated by a towering conical rock on which stood the fort of Jamálabád, and another large double peaked rock near Mudbidri known to mariners as the Ass's Ears, rises to the height of about 1,100 feet, although it lies some ten miles to the west of the line of ghauts. All over the district there are detached low hills which become less frequent as the coast is approached.

The most interesting of the mountains of South Canara is of course the Kudre Mukh group of three peaks on the highest scarp of a ridge of the Western Ghauts facing Beltangadi. The most prominent of the peaks is that known as the 'Mukh Head,' which is 6,173 feet above sea-level with a magnificent precipice of over 1,000 feet, but the two other peaks are slightly higher, that known as 'Midge Point,' being 6,177 feet high, while 'Funk Hill' is as much as 6,207. The civilians' bungalow is at the edge of a beautiful shola running down from the ridge, about twenty minutes' walk from the top, and overlooks the Mysore village of Samse with Kalasa Peak beyond. From the perennial stream in the shola, water is led off to the bungalow and dropping about 15 feet over a low cliff into a pool forms what is known as the 'Douche,' appreciated by all who come home hot and weary after a long morning's stalk.

The most important of the other peaks of the ghauts are Kodashadri, 17 miles from Coondapoor and about 4,400 feet high, Balálráya Drug (4,934) over the Bangadi valley, Káte Gúdda (4,534) to the south of the Chármadi ghaut road, Sisalkal (3,921) over the old Sisala ghaut, and Subramanya (5,637) overlooking

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the Bisli ghaut and the well-known temple of Subramanya. Amongst isolated hills Ammadikkal rises from the low country a little distance off the ghauts in the Uppinangadi taluk to a height of 4,261 feet, and the rock of Jamálabád mentioned above is as high as 1,788 feet.

Rivers.

The rivers of South Canara necessarily run from east to west and as not one of them takes its rise as much as 20 miles beyond the peaks of the Western Ghauts, which are nowhere more than about 50 miles from the sea, the course of the longest is considerably under 100 miles. With the heavy rainfall of the south-west monsoon and the broken nature of the country, the rivers and streams are innumerable and the volume of water is very great at times, but the current is then rapid and the circumstances generally are unfavourable to their use as a means of communication. In the dry weather, owing to the rocky character of their beds, the rivers are not usually navigable for many miles above the reach of tidal influence. Within these limits, however, they are very extensively used for bringing produce to the coast ports and towns, and great facilities for traffic up-and-down portions of the coast are also afforded by the backwaters or salt-water lagoons, which are formed by sand spits thrown up by the meeting of the river and littoral currents, and often run for several miles along the coast before the waters of the river find their way into the sea, two rivers frequently making their exit by one opening. A scheme to establish a system of canal communication from north to south by connecting these backwaters is now under investigation. When it is accomplished facilities will be afforded for traffic along the coast throughout the whole year instead of being practically put a stop to as at present during four or five months of the south-west monsoon.

The six principal rivers of South Canara are the Nétravati, the Gurpúr river, the Gangoli river or Gurget, the Chandragiri or Paiswani, the Sítanadi and Suvarnanadi.

When the force of the south-west monsoon is at its height, some of the larger rivers become swollen by the heavy rains and overflow their banks, inundating the surrounding country. These floods do not last long, and within a short time the rivers retire to their usual channels. Occasionally crops sustain some damage, but the floods are seldom destructive to life and property and the deposit of fertilizing silt made by them is highly beneficial.

The Nétravati takes its rise in the ghauts to the east of the Kudre Mukh and flows down the Bangadi valley past Beltangadi, after which, joined by other streams from the ghauts, it meets at Uppinangadi another and larger river called the Kumardhari, which comes from Kumara Parwat near Subramanya. The combined stream, retaining the name Nétravati, passes over a very

Rivers.

rocky bed with many rapids to Bantval, and westwards through richly wooded banks to Mangalore. From Bantval the river is navigable to boats of a capacity of about three tons, and as it approaches Mangalore, the channel assumes wider proportions and is studded by a number of small islands called 'Kadres,' rising a few feet above the surface of the water. These islets are exceedingly fertile and rice and sugar-cane cultivation is extensively carried on in them.

At Mangalore, the Nétravati effects a junction with the Gurpúr river and both discharge the large volume of their combined waters into a backwater, forming a common estuary to the two rivers, and having a long spit of sand intervening between it and the sea. At present the openings from the backwater to the sea are two in number, one at the northern and the other at the southern extremity of the backwater, the latter having opened a few years ago at much the same place as old maps show the opening at the beginning of the century. The tendency seems to be for the southern mouth to move northwards, and the northern to move southwards till they meet, after which the single opening moves northwards till the stream of the larger river at the south again bursts a separate opening for itself.

The Gurget is the name of the most important of several streams of no great size, that meet and form a broad estuary to the north of the town of Coondapoor, and fall into the sea at Gangoli. This estuary is really a most picturesque and extensive salt-water lake with only one outlet into the sea. Of the streams forming it, the Kollúr, Haladi or Gurget and Chakranadi rivers are alone of any importance.

As the Western Ghauts are, in the Coondapoor taluk, nowhere more than 25 miles from the sea, the course of these rivers is very short, but, owing to the heavy rains, the quantity of water brought down is, by no means, inconsiderable. The Haladi river takes its rise in the ghauts near Amashabail, about 6 miles to the north of the Udipi taluk. It is influenced by the tide nearly as far as Haladi about 17 miles from the mouth, and is navigable to that place, even at the driest season, by boats containing one *corji* or about 1½ tons of rice. The Kollúr river has its source in the ghauts forming the north-western boundary of the Coondapoor taluk, a few miles beyond Dali. It skirts the coast for about 10 miles north of Coondapoor and is navigable to a distance of 12 miles from its mouth. The Chakranadi river joins the Kollúr 3 miles from Coondapoor and is navigable for boats of small burthen as far as Wandse, about 12 miles from the entrance to the backwater.

A little to the south of Kásaragód village, a large backwater is formed by the Chandragiri river, which constitutes the boundary

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between the Tulu and Malayali races, that part of the Kásaragód taluk, which lies to the south of this river, being peopled by the same castes as are found in the neighbouring district of Malabar. The Chandragiri river is navigable for about 10 miles from its mouth. It has two branches, one rising in the Uppinangadi hills, and the other in the ghauts on the Coorg frontier.

The Sítanadi takes its rise in the ghauts beyond Sóméshwar to the north-east of the Udipi taluk, while the Suvarnanadi flows from the hills situated at the south-eastern boundary of the same taluk. Both fall into the sea at Bárkúr or Hangarkatta, nearly 8 miles to the north of the town of Udipi, a large backwater being formed by their junction. The Sítanadi is navigable as far as Kokarni, 11 miles inland, and the Suvarnanadi, up to Baje about 12 miles from the coast, from both of which places the merchandise from the interior and from above the ghauts is taken down by boats to be exported from the port of Hangarkatta.

Roads.

Communication between the district and the country above the ghauts is maintained by means of seven well-traced roads through passes in the Western Ghauts, besides a number of paths and cattle tracks, which latter are fast falling into disuse. The main roads from five out of the seven passes converge on Mangalore. Beginning from the south the road from Madras through Bangalore and Merkara comes down the Sumpaje pass and enters South Canara about 66 miles from Mangalore. After passing through Puttúr, the head-quarters of the Uppinangadi taluk, it is joined at Máni by the road from Manjarabád, which comes down the Siradi Ghaut road and at Uppinangadi by a road from the newly constructed Bisli Ghaut road which enters the district near the tri-junction of Mysore, Canara and Coorg. Farther north there is a road from the Kadúr district of Mysore by the Charmádi or Kodekal pass, which joins the before-mentioned roads about 15 miles from Mangalore. The next pass is at Agumbe to the north of the Udipi taluk, and near Sóméshwar at the foot of the pass, roads branch off towards the ports of Coondapoor, Bárkúr and Udipi, but the main road comes on to Mangalore. The Hossangadi or Hyderghur Ghaut from Bednore or Nugger has direct communication only with the river leading to the port of Coondapoor, to which port also comes the road from the Kollur pass, the most northerly of the made ghaut roads of the district. In addition to these through lines of communication the district is well supplied with cross lines and feeders, with regard to which farther information will be found in the taluk notices. The number of broad estuaries and backwaters and the long stretches of sand near the coast makes it impossible ever to have a thoroughly satisfactory coast road, but a good deal has lately been done to improve it,

and as it passes through the most thickly populated portions of the district, there is a heavy local traffic of all kinds on sections of it, and the road throughout is much used by travellers to and from Mangalore. Wheeled conveyances, &c., are taken across the rivers by means of platforms on boats.

Forests.

South Canara is essentially a forest district. The slopes of the Western Ghauts from north to south are clothed with dense forests of magnificent timber, and the forest growth, stimulated by the heavy rainfall, approaches within a few miles of the coast to the north of the Coondapoor taluk, and again in the southern máganés of the Kásaragód taluk. Generally the heavy forest begins from 20 to 30 miles from the coast, but to the south of the Mangalore taluk and the north of the Kásaragód taluk it recedes farther inland, the plains being more extensive and the population denser than elsewhere in the valleys of the various streams which flow into the Nétravati river which enters the sea at Mangalore. Even on the plains, however, a large portion of the Uppinangadi taluk is covered with heavy forest, and jungle varying from moderate forest to mere scrub is to be found everywhere throughout an exceptionally large area of waste land, cultivation in South Canara being confined mainly to the plains close to the coast, and the bottoms of the innumerable valleys which wind amongst laterite hills and plateaus from the ghauts to the sea. The only bare spots are some of the hard laterite plateaus which seem now-a-days to produce nothing but thatching grass, and a certain proportion of the waste which has been recklessly denuded for the supply of fuel and manure. Notable instances of the latter are the hill slopes adjoining the areca-nut plantations in the Vittal Mágane of the Kásaragód taluk. Complete denudation of the slopes of valleys in other parts is comparatively rare, but over large tracts mere bushes or low coppice now grow where fine timber once abounded as can be seen from the patches of carefully conserved 'kumaki' lands. This clearance is not modern. It was noticed in 1801 by Buchanan, who wrote regarding the country in the neighbourhood of Beltangadi "on "the hills many trees have now grown up, but it would appear "that formerly they had all been cleared, and to keep the "bushes down and destroy vermin the grass is still annually "burned."

Nothing is now on record which can enable us to decide whether any definite rules of forest administration were in force under the early native governments, but there are numerous indications that the value of forest for the preservation of springs and the supply of leaves for manure, was well understood by private owners, and in later days Tippu introduced rules of

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draconic severity for the conservancy of sandalwood for his revenue, and teak for his navy. During the century or so of foreign invasion, and intestine strife, and wiping out of petty local courts, which preceded the arrival of the British, large tracts of country in the neighbourhood of the ghauts became practically depopulated and tended to revert to forest. When affairs became more settled under British administration, and extension of cultivation was again desired, the advancing forest was not unnaturally regarded in the light of an enemy to be got rid of, and clearances were encouraged and stimulated in every possible way. The views regarding the claims to private property in forest land, definitely recognised in the adjoining district of Malabar, were also held to be generally applicable to South Canara. Large areas of forest were always spoken of as forming parts of estates, and in certain cases these views were irrevocably given effect to, up to 1844, by the formal grant of 'mulpattas' for deserted estates, in which full proprietary rights were assigned within specific boundaries which included large areas of waste and forest land. These boundaries were usually the '*nettikatt*' or crest of the hills overlooking cultivated valleys. In 1822, though it was still held that large areas of forest were private property, an attempt was made to define them and lists were called for of all the Government forests in the district. Orders were, at the same time, issued that when a Government forest adjoined cultivated land a margin of 100 yards was to be left as '*kumaki*' (aid) to the cultivation. This was the same term as was in use to designate the aid afforded to all valley cultivation by the forest growth on the hill slopes up to the '*nettikatt*,' but as time wore on and the rights of Government were more and more asserted from 1839 onwards, the origin and limited nature of the '100 yards *kumaki*' got lost sight of, and '*kumaki*' has come to mean a semi-proprietary right to forest within 100 yards of all cultivation, while the old '*nettikatt*' right has become nothing more than a common usufruct of the open hill side for grazing, and the collection of leaves for manure, and sticks for fuel and fencing. While thus gradually extinguishing proprietary rights the Government omitted to enforce strict Government conservancy, and as a consequence landholders proceeded to make hay while the sun shone, and encouraged coast merchants and others to make such a clearance of the forests that at the present time it is impossible to derive any revenue worth speaking of from the timber within a marketable distance of the coast, which now receives supplies from the private forests of Malabar at cheaper rates than timber can be procured from the

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local forests, which in Canara have not the advantage of the numerous navigable rivers which are to be found in Malabar. In addition to the denudation of the good timber by merchants, the forests about the same time suffered by a large extension of the destructive temporary cultivation known as '*kumari*,' under which a large tract of fine forest was felled, and the wood burned, in order that a catch crop or two might be grown in the rich soil manured by the ashes, after which the cultivators moved on and repeated their depredations in a new tract. It was not till 1860 that this matter was seriously taken in hand, but in that year sweeping orders were issued directing its discontinuance except in the five southern máganés of the Kásaragód taluk which had been taken over from Malabar, in which private property in forest land had been more distinctly allowed than in Canara. Subsequently this strict rule was relaxed a little to meet the case of certain forest tribes within the Coondapoor and Uppinangadi taluks, who had no other means of livelihood, and, now under strict forest conservancy, it seems probable that it may be desirable to allow it here and there elsewhere so as to keep settlers in the reserved forests, it being impossible to work an entirely deserted forest.

In 1874 before the passing of the Forest Act the Government directed the removal of all existing restrictions from the exercise of proprietary rights in jungles which were private property, and the demarcation of valuable forests admittedly the property of Government. This involved an elaborate inquiry, and before it was completed a decision of the Bombay High Court in a suit from North Canara very materially modified, in favour of Government, the views held by the Madras Government of 1874 regarding private rights over forests. This, and the passing of the Forest Act of 1882 with its prescribed procedure for the formal disposal of claims, rendered the inquiry begun in 1874 of little value except as a preliminary investigation. It was made clear, however, that only a very small area of the forest land in Canara had any legal claim to be considered private forest, while the great bulk was Government property subject only to rights of way and water, and rights to pasture and forest produce over the portions adjoining cultivated lands. As a preliminary step towards the constitution of reserved forests, notifications were issued declaring by name a large number of forests to be reserved lands, with the exception of the slopes immediately adjoining cultivation. The approximate area thus reserved was about 1,000 square miles. From these reserved lands the District Forest Officer has been for some years engaged in selecting suitable blocks to be constituted reserved forests, excluding all lands over which there are claims

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which cannot, or ought not to be disputed. The final settlement of many of these blocks has been delayed pending the decision of some appeals by the courts, and orders by the Board and Government, on some minor questions of policy.

Besides these 1,000 square miles of forest which are eventually to be constituted 'reserved forests,' there are many hundreds of square miles of forest which will be left unreserved, and as above stated the greater part of the waste land of Canara is covered with forest or jungle growth of some kind. Over all these unreserved lands the villagers exercise considerable privileges in the way of grazing cattle and cutting timber, other than certain specified trees, for fuel or for building or agricultural or domestic purposes. The cutting of forest produce for agricultural purposes is a very extensive privilege, as immense quantities of leaves, twigs, and even branches are used for the 500 odd square miles of land under rice cultivation, a method of manuring which, it need hardly be said, would be impossible, except in a country like Canara, where natural forest reproduction is stimulated by a rainfall of 130 inches in a tropical climate. In the '100 yards *kumaki*' lands above alluded to, which usually owe their existence in their present state to the strict conservancy exercised by the holders of the adjoining cultivated lands, the holders are also allowed to fell timber of all classes for their own use, and permits for felling the trees on them cannot be given by Government to others, except with the permission of the holders of the *kumakis*. Free-felling for sale is not allowed to any one, but in practice, as regards firewood, this rule is enforced only in connection with the supply of the larger towns and bazaars, such as Mangalore, Bantvál, Udipi, Kárakal, Coondapoor, Puttúr and Kásaragód. A large proportion of the firewood used in the town of Mangalore is brought by sea from the southern portion of the Kásaragód taluk, where, as above stated, '*kumari*' cultivation is still allowed and the larger timber not reduced to ashes for manure is available for export as firewood.

The forests in Canara are both evergreen and deciduous, and many of the trees, notably the Poonspar (Calophyllum elatum) and the Kiralboghi (Hopea parviflora) attain an immense size, especially on the ghaut slopes. Teak is most abundant in the Uppinangadi and Kásaragód taluks, but it is to be found here and there throughout the district. Blackwood is most common in Coondapoor and Uppinangadi. Some details regarding these and all the other timber trees will be found under the head 'Flora,' and it is unnecessary to do more here than give a list of those which have been selected as the most deserving of protection even on unreserved lands. On the coppiced or shrub jungle throughout

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the district, the commonest trees and bushes are perhaps Emblica officinalis, Strychnos nux vomica, Cinnamomum zeylanicum, Eugenia jambolam, Anacardium occidentale (cashew-nut), Ixora coccinea, and in the Coondapoor taluk Acacia catechu and Acacia sundra. The 'reserved' trees are the following :

No.	Botanical name.	English.	Canarese.
1	Tectona grandis	Teak	Saguvani.
2	Dalbergia latifolia	Blackwood ...	Biti.
3	Santalum album	Sandalwood ...	Gandha.
4	Artocarpus integrifolia	Jack	Halasu.
5	Artocarpus hirsuta	Wild jack ...	Hebbalasu.
6	Diospiros ebenum and melanoxylon.	Ebony	Karimara.
7	Acacia catechu and sundra ...	Catechu ...	Káchu.
8	Calophyllum elatum	Poonspar ...	Srihonne.
9	Cinnamomum zeylanicum	Cinnamon ...	Dalchini.

Those which are considered less valuable, but still deserving of special protection, have been designated 'classified trees' and cannot be felled without permits even on unreserved lands. They are the following :

No.	Botanical name.	English.	Canarese.
1	Hopea parviflora	......	Kiralboghi.
2	Terminalia tomentosa	......	Banapu or Matti.
3	Terminalia paniculata	......	Maravu or Honnagalu.
4	Terminalia chebula	Myrabolan ...	Anile.
5	Pterocarpus marsupium	Kino	Bengha.
6	Xylia dolabriformis	Ironwood ...	Tiruva or jembe.
7	Lagerstrœmia microcarpa	Benteak ...	Bolandur or bilinandi.
8	Calophyllum wightianum	......	Kalpun.
9	Artocarpus lakoocha	......	Wátehuli.
10	Albizzia odoratissima	......	Kalbághi.

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No.	Botanical name.	English.	Canarese.
11	Albizzia lebbek	......	Pulibghi.
12	Hopea odorata	......	Bilitir pu.
13	Vitex altissima	......	Myrol.
14	Adenanthera pavonina	......	Manjetti.
15	Borassus flabelliformis	Palmyra ...	Tálimara.

Owing to the large area of unreserved land suitable for grazing purposes, and the manner in which cultivated land and forest are intermingled in Canara, no attempt has yet been made to raise forest revenue by the imposition of grazing fees. For the reason already mentioned departmental felling of timber is not at present carried out on a large scale, operations being confined to the Uppinangadi taluk for the supply of the Mangalore market. Local wants in excess of privileges are met by the issue of permits for reserved and classified trees throughout the district. Firewood is charged for only when taken to the larger towns. At one time a considerable revenue was realized by allowing stills to be set up in the ghaut forests for the distillation of sandalwood oil from sandalwood brought from Mysore, but an attempt to regulate the felling of the required firewood was met by a kind of strike, and a ruling that '*kumaki*' firewood could be legally used for the purpose has temporarily put a stop to revenue from that source. The most extensive forest revenue operations are really in connection with minor produce. In reserved forests a great variety of such produce is collected by agents of the department and brought into depôts when they are paid for at fixed rates, and in the case of scattered forests and '*kumaki*' lands any one who chooses can bring the produce to a depôt and receive payment therefor.[4] The most widespread produce collected in this way is perhaps 'shigekai' (Acacia concinna), which every alternate year gives a crop of nearly 100 tons. Above this in value and next to it in quantity comes 'rámapatre' or wild mace (Myristica malabarica), of which some 25 tons, worth about as many thousand rupees, may be considered a good crop. Next in importance come 'cinnamon buds,' the flower of the 'dálchini' or Cinnamomum zeylanicum. The seeds of the Strychnos nux vomica or 'kásarakana mara' are procurable in considerable quan-

[4] An attempt is now being made to work the minor produce on the contract system.

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tities, but do not pay the cost of collection except in localities near a market, and hardly 10 tons are collected annually. Myrabolans are found mainly in the Coondapoor taluk, but they are poor in quality and not very abundant. Pepper is not so abundant as it was before Tippu deliberately suppressed the trade to prevent intercourse with Europeans, but a few tons are gathered annually. The collection of these products affords employment at certain seasons to large numbers of poor people, equivalent if the work were distributed throughout the year to an establishment of about 500 men, women and children on an average wage of 2 annas a day.

Flora.

The botanical and medicinal particulars given in the following list of the flora of the district have been taken mainly from Drury's "Useful Plants of India," from the "Pharmacopœia of India," and from a Canarese publication by Messrs. Pflebst and Stolz of the Basel Mission at Mangalore. Only such plants are mentioned as have an economic or medicinal value, or are so widely spread as to form an important feature of the flora of South Canara. The families are arranged according to the natural system of Endlicher :—

GRAMINACEÆ—

1. *Oryza sativa*, Can. *akki*, Eng. *rice*.

This is the staple product of the district and has been separately noticed under another head.

2. *Eleusine corocana*, Can. *rági*.

This crop is grown only to a limited extent, mainly in kumaris, but also as a monsoon crop on uplands which have not been levelled for rice cultivation, and as an irrigated cold weather crop in the neighbourhood of the ghauts.

3. *Zea mays*, Can. *dodda jóla*, Eng. *maize*.

Grown very sparingly as a garden crop.

4. *Saccharum officinarum*, Can. *kabbu*, Eng. *sugar-cane*.

The cultivation of sugar-cane has been described under the head of products.

5. *Bambusa arundinacea*, Can. *bidru gala*, Eng. *common bamboo*.

Of the common bamboos there are several varieties, all of which are common in the forests throughout the district. The large and middle-sized bamboos are used largely for building, as masts and spars for native vessels, for scaffolding, tent poles, ladders, floating timber, &c., and a smaller-sized bamboo, known as 'kiri bidru,' is used mainly for battens, roofing, flooring, and split to make walls for houses, matting, baskets, &c. A still smaller variety known as 'wante' or 'wâte' is used chiefly for baskets and matting.

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6. *Bambusa stricta*, Can. *gandu bidru*, Eng. *male bamboo.*

This is a solid bamboo which is used mainly for roofs, floors, battens and spear handles.

7. *Cynodon dactylon*, Can. *kariké hullu*, Eng. *hariali grass.*

This grass is not very abundant in the district, but it is found in low-lying localities.

8. *Andropogon muricatum*, Can. *kasuru hullu*, Eng. *cuscus grass.*

9. *Poa cynosuroides*, Can. *darba hullu.*

This is probably the most common grass in Canara, but there are numerous species which do not seem ever to have been examined and classified.

LILIACEÆ—

1. *Asparagus racemosus*, Can. *shatamúli balli.*

A very pretty climbing shrub with feathery leaves, common all over the district. The root is used medicinally by the natives, but is regarded as unworthy of notice by the compiler of the "Pharmacopœia of India."

2. *Scilla indica*, Can. *kádu-belluli-gida.*

This grows in sandy places near the shore. The bulb is described in the "Pharmacopœia of India" as a fair substitute for the officinal squill.

3. *Gloriosa superba*, Can. *shiva-shakti-balli.*

A very handsome climbing plant, common throughout the district. The root is used medicinally by the natives and is commonly believed to be very poisonous. Its properties, however, are not yet very well ascertained.

DIOSCOREACEÆ—

1. *Dioscorea tomentosa*, Can. *mullu genasu.*
2. *Dioscorea alata*, Can. *túna genasu.*
3. *Dioscorea aculeata*, Can. *sigenasu.*
4. *Dioscorea pulchella*, Can. *kunta genasu.*
5. *Dioscorea atropurpurea*, Can. *hebbu genasu.*

All the above yams are grown commonly in gardens throughout the district.

AGAVEACEÆ—

Agave americana, Can. *áne katáli.*

The American aloe is not so common in Canara as on the east coast, but it is grown to a certain extent for hedges and for its fibre.

BROMELIACEÆ—

Ananas sativus, Can. *anásu, pharangi-halasu*, Eng. *pine-apple.*

The pine-apple was introduced into the west coast of India, by the Portuguese, and is largely and successfully grown in Canara, sometimes with little or no care, or merely for hedges; but when

cultivated with care, very fine specimens of the fruit are obtained. The fibre is not much used.

ZINGIBERACEÆ—

1. *Zingiber officinale*, Can. *sunti*, Eng. *ginger*.

Ginger is commonly grown in what is called 'hakkal' cultivation which is described elsewhere. It used to be cultivated on a somewhat extensive scale at Kokkada in the Beltangadi division of the Uppinangadi taluk, but the cultivation has fallen off of late years. Small patches of it are still grown all over the district, but chiefly in the Mangalore and Uppinangadi taluks.

2. *Zingiber zerumbet*, Can. *kádu sunti*, Eng. *wild ginger*.

This plant is very common in the forests at the foot of the ghauts. The rhizome possesses in a minor degree the carminative properties of common ginger.

3. *Curcuma longa*, Can. *arasina-gida*, Eng. *turmeric*.

Turmeric is grown chiefly in the Karakal division of the Udipi taluk, and exported from the port of Hangarkatta, but like ginger it is cultivated in small patches, chiefly in 'hakkal' cultivation, all over the district. Its ordinary uses are well known. It is much used in native medicine, but in the Pharmacopœia it is stated to be officinal only as a chemical test.

4. *Curcuma aromatica*, Can. *kádu arasina-gida*, Eng. *wild turmeric*.

This plant is very common in the ghaut forests. It is used by the natives as a perfume and medicinally.

5. *Curcuma angustifolia*, Can. *kúve*, Eng. *East Indian arrow-root*.

The 'kúve' plant is very common in moist places in the forests throughout the whole district. A very fair arrow-root can be prepared from the tubers with care, but that which is usually made in South Canara and which sometimes can be bought in the bazaars is hastily made and very dirty.

6. *Ellettaria cardamomum*, Can. *yélakki*, Eng. *cardamom*.

Cardamoms are found here and there all over the ghaut forests, and the natural growth is sometimes improved and developed by a partial clearing of the forest. The most important cardamom forest is at Neriya near Beltangadi. Several forests near the Bisli and Merkara ghauts have recently been leased out by the Forest Department for cardamom cultivation, and the landholders in the southern máganés of the Kásaragód taluk also give attention to the cultivation of this product. In the northern taluks little has been done, but cardamoms are found at Tingala-makki near Sóméshwar in the Udipi taluk.

7. *Costus speciosus*, Can. *pushkaramúla*.

A very handsome species found in moist places all over the Canara forests.

CHAP. I. GENERAL DESCRIPTION. Flora.

MUSACEÆ—

1. *Musa paradasiaca*, Can. *bále*, Eng. *plantain*.

The plantain is cultivated extensively all over South Canara, and the varieties most appreciated by Europeans are very successfully grown near Mangalore.

2. *Musa superba*, Can. *kádu bále*, Eng. *wild plantain*.

The wild plantain grows freely all over the ghaut forests. It is valued only for its fibre.

ARACEÆ—

1. *Arum colocasia*, Can. *késu*.

Grown in gardens. The leaves and stalks and occasionally the tubers are eaten by the natives.

2. *Arum campanalatum*, Can. *gandira*, Eng. *telinga potato*.

The roots of this plant are very nutritious and are eaten in the same way as yams.

3. *Acorus calamus*, Can. *baje*, Eng. *sweet flag*.

A common plant in moist places. The rhizome is one of the most popular of native remedies and is stated in the "Pharmacopœia of India" to be well adapted for certain forms of dyspepsia and to have been favourably noticed as an ante-periodic and a stimulant diaphoretic. The powdered rhizome is a valuable insectifuge, especially as regards fleas.

PANDANACEÆ—

Pandanus odoratissimus, Can. *mundige*, Eng. *fragrant screw pine*.

This plant is exceedingly common all along the streams and backwaters of the district. The flowers known as 'kédige' are much worn by the people and imitated in their gold ornaments; an oil is also extracted from them. The leaves are used for making mats and the fibre is also much valued.

PALMACEÆ—

1. *Cocos nucifera*, Can. *tengina-mara*, Eng. *cocoanut palm*.

The cocoanut palm is very extensively cultivated in Canara and the method of cultivation has been specially described under another head. It is grown mainly on the coast and in the valleys of the larger rivers.

2. *Areca catechu*, Can. *adike*, Eng. *areca palm*.

The cultivation of this palm has also been separately described. It is grown mainly in deep shady valleys in the forest tracts of the district. The nut is the well known betel nut.

3. *Borassus flabelliformis*, Can. *tále*, Eng. *palmyra*.

The palmyra is most common in the Mangalore and Kásaragód taluks, growing chiefly on the slopes from the cultivated valleys to the laterite plateaus above, or on sandy plains near the coast. The fruit is not much used and the tree is valued mainly for the juice, which is either drunk as toddy, distilled into arrack

or made into jaggery. The leaves are used for many purposes like those of the cocoanut palm. The wood is valuable for rafters.

Flora.

4. *Caryota urens*, Can. *bainé*, Eng. *bastard sago*.

This palm is found wild throughout the ghaut forests. It yields toddy very abundantly and the wood is used for aqueducts. A very strong fibre, used for fishing lines and known as Indian gut, is made from the leaves. If found in sufficient quantities it would be valuable for export to Europe for brush making.

5. *Phœnix sylvestris*, Can. *ichil*, Eng. *wild date*.

This tree is found in the district, but the climate is too moist for it to thrive well. Mats are made of the leaves.

6. *Phœnix farinifera*, Can. *sanna ichil*, Eng. *dwarf wild date*.

This species is found chiefly on the open hill sides on the ghauts.

7. *Corypha umbraculifera*, Can. *sritále*, Eng. *talipot or fan palm*.

This species is not very common in the district. Umbrellas used to be made of the leaves, but these are fast giving way to umbrellas of European manufacture. The best 'cadjan' writing leaves are got from this palm.

8. *Calamus rotang*, Can. *betta*, Eng. *rattan cane*.

This is the common rattan cane and is found all over the ghaut forests. A variety covered with black spots, called 'nágabetta' in Canarese, is found near Subramania in the Uppinangadi taluk and is much valued for walking sticks.

PIPERACEÆ—

1. *Piper nigrum*, Can. *olle menasu*, Eng. *black pepper*.

Pepper is indigenous in the Canara forests, but is not now nearly so much cultivated as it was in the last century, the pepper trade with Europeans having been interdicted by Hyder and Tippu. Such cultivation as there is is carried on mainly in bits of evergreen forest, known as '*káns*', attached to *wargs* in the Uppinangadi taluk. Cultivation of the pepper vine in gardens in the low country is carried on only to a small extent. White pepper is the same fruit as the black pepper, the ripe berries being deprived of the outer skin by maceration in water.

2. *Piper longum*, Can. *hippali*, Eng. *long pepper*.

This plant is grown to a small extent in gardens. The fruit is mainly used as a condiment. It is said to possess more powerful carminative properties than black pepper.

3. *Piper betel*, Can. *vilyada balli*, Eng. *betel leaf*.

The cultivation of the betel leaf is general throughout Canara and has been described elsewhere.

CHAP. I. GENERAL DESCRIPTION. Flora.

CASUARINACEÆ—

Casuarina muricata, Can. *chabukina-mara*, Eng. *casuarina*.

The casuarina has been lately introduced into Canara and several plantations have been formed near Mangalore.

MORACEÆ—

1. *Ficus racemosa*, Can. *atti-mara*, Eng. *country fig tree*.

The fruit is edible. The root, in decoction, and the bark are sometimes used in native medicines.

2. *Ficus religiosa*, Can. *ashwatta-mara*, Eng. *peepal, sacred fig tree*.

These trees are found with basements built round them all over the district, with a 'snake-stone' as a frequent accompaniment.

3. *Ficus bengalensis*, Can. *álada-mara*, *góli-mara*, Eng. *common banyan tree*.

This tree is very widespread. It is much used for avenues, and large solitary trees are often found in pasture lands, affording shade to a large number of cattle. The juice is used for toothache and the bark as a tonic.

4. *Urostigma pisiferum*, Can. *kiru-góli*.

This is a small kind of banyan tree, not uncommon throughout the district.

5. *Ficus conglomerata*, Can. *gargasada-mara*.

The leaves of this tree are rough like sand-paper and are used for polishing wood. The fruit is used medicinally. The tree is common enough in Canara.

ARTOCARPACEÆ—

1. *Artocarpus integrifolia*, Can. *halasu*, Eng. *jack*.

The common jack tree grows very abundantly in Canara. At the proper season the fruit affords food to large numbers of the poorer classes, and is eaten by all. The seeds are also eaten roasted, and the leaves are given to fatten sheep and goats. The timber is very valuable and the juice is used medicinally.

2. *Artocarpus hirsuta*, Can. *hebbalasu*, Eng. *wild jack*.

The timber of this tree is even more valuable than that of the ordinary jack. The fruit also is edible, but it is not considered worth while to grow the tree for the fruit. A dye is made from the bark, and the leaves are used medicinally.

3. *Artocarpus lakoocha*, Can. *wáte-huli*.

The fruit of this tree is much used in curries in Canara instead of tamarind.

4. *Artocarpus incisa*, Can. *divi halasu*, Eng. *bread-fruit tree*.

This tree is common in the Amindívi Islands attached to the district of South Canara, and is grown occasionally in gardens on the mainland.

URTICACEÆ—

Urtica heterophylla, Can. *turike-gida*, Eng. *Nilgiri nettle*.

It is given as a decoction for fever, and a fibre is made from it.

PUTRANJIVACACEÆ—

Putranjiva roxburghii, Can. *putrajiva*, Eng. *wild olive*.

A middle-sized somewhat rare evergreen tree, of which the nuts are worn as necklaces by children to keep off sickness, hence the vernacular name.

CANNABINACEÆ—

Cannabis sativa, Can. *bangi*, Eng. *hemp*.

Hemp is grown in Canara for the seed only in back-gardens, usually in small quantities for private consumption as ganja or bangi, and occasionally for sale in a small way. The cultivation prevails throughout the district, but more in the Coondapoor taluk than elsewhere.

CHERNOPODACEÆ—

Basella alba and rubra, Can. *basale balli*, Eng. *Malabar night-shade*.

This is grown all over the district and is eaten cooked like spinach.

AMARANTACEÆ—

Amarantus oleraceous, Can. *harive-soppu*.

This is a very favourite vegetable in all parts of the district.

NYCTÁGINACEÆ—

1. *Mirabilis jalapa*, Can. *madhyána mallige*, Eng. *four o'clock flower*.

The root of this plant is stated in native medical works to be an efficient purgative equal to common jalap, but in chemical trials its powers were found to be feeble and uncertain. The bruised leaves are applied by natives to boils and abscesses to hasten suppuration.

2. *Bœrhavia diffusa*, Can. *sanádiká-gida*, Eng. *spreading hogweed*.

A common and troublesome weed. The root is used medicinally as a laxative vermifuge, expectorant and emetic.

LAURACEÆ—

Cinnamomum zeylanicum, Can. *dálchini*, Eng. *cinnamon*.

The cinnamon tree, which grows wild all over the district except in the heavy forests of the ghauts, is probably a variety of the true cinnamon (Cinnamomum zeylanicum). The most important product of the tree is the immature flower, which is much used in native medicines and known to commerce as cassia buds. The bark is exported to some extent, and a volatile oil is distilled from the leaves.

SANTALACEÆ—

Santalum album, Can. *gandhada-mara*, Eng. *sandal-wood*.

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The sandal-wood tree grows freely all over the open scrub forest of South Canara, but on the plains the fragrant heart-wood does not develope properly and is practically useless for the distillation of sandal-wood oil.

ARISTOLOCHIACEÆ—

Aristolochia indica, Can. *ishwara-gida*, Eng. *Indian birthwort.*

A common jungle creeper with a nauseous bitter root, much used by the natives as a stimulant and febrifuge.

PLUMBAGINACEÆ—

1. *Plumbago rosea*, Can. *kempu chitramúla*, Eng. *rose-coloured leadwort.*

Grown in gardens. The bruised root is acrid and stimulating. It is used by the natives as a blister, and is mixed with oil as an embrocation.

2. *Plumbago zeylanica*, Can. *bili chitramúla*, Eng. *Ceylon leadwort.*

A wild variety of the foregoing, possessing similar, but less powerful properties.

COMPOSITÆ—

1. *Sphæranthus hirtus*, Can. *karande.*

A common plant on the banks of rice fields, used medicinally by the natives.

2. *Vernonia anthelmintica*, Can. *kádu-jirige*, Eng. *purple fleabane.*

The seeds of this plant are a valuable anthelmintic in ascarides, and are highly valued by the natives.

3. *Pyrethrum indicum*, Can. *sévantige.*

Grown in gardens for its fragrant and ornamental flowers.

LOBELIACEÆ—

Lobelia nicotianæfolia, Can. *kádu-hogesoppu.*

This plant, which grows in the ghaut forests, is called wild tobacco by the natives. The leaves are said to cause giddiness if eaten, and bees get much honey from the flowers.

RUBIACEÆ—

1. *Coffea arabica*, Can. *káphi-gida*, *bunnu-gida*, Eng. *coffee.*

A small amount of coffee is grown for trade purposes just below the ghauts in the Uppinangadi taluk and in the southern máganés of the Kásaragód taluk. Coffee bushes are found here and there in gardens all over the district.

2. *Ixora coccinea*, Can. *képala.*

An evergreen shrub with beautiful red flowers disposed in ample corymbs, to be found flowering all the year round in every forest or open piece of scrub jungle from the ghauts to the coast.

3. *Gardenia lucida*, Can. *dikká-malli.*

A small tree with large white flowers. The resin is fragrant and good for keeping flies and worms off sores.

4. *Ophiorrhiza munghos*, Can. *pátála-garuda-gida*.

Flora.

The root of this plant is intensely bitter and is regarded by the natives as an antidote for snake-bites.

5. *Mussænda frondosa*, Can. *bellotti*.

A large, handsome and very common shrub, which attracts notice in the forests by a part of the calyx looking like a large white leaf.

6. *Morinda umbellata*, Can. *poppili*, *maradarisina*.

The root of this tree yields a dye of permanent yellow.

JASMINIACEÆ—

1. *Jasminum sambac*, Can. *mallige*.

This plant is common in the forests, and is also cultivated for the fragrant flowers, which are also used as a lactifuge.

2. *Jasminum angustifolium*, Can. *kádmallige*.
3. *Jasminum hirsutum*, Can. *kastúri-mallige*.
4. *Jasminum grandiflorum*, Can. *jáji-mallige*.
5. *Jasminum pubescens*, Can. *dodda kádu-mallige*.

All the above jasmins are much valued for their flowers.

LOGANIACEÆ—

1. *Strychnos nux vomica*, Can. *kásarkana*.

The nux vomica tree is one of the most common trees throughout the whole of the district. The seed is most valued both in native and European medicine, and the well-known poison strychnine is prepared from the kernel of the fruit. The pulp of the fruit is harmless and eaten by birds, monkeys and cattle. In some parts of the district in the dry weather, where grass is scarce, no milk can be got without a bitter taste owing to the cattle eating the leaves of coppiced nux vomica trees.

2. *Strychnos potatorum*, Can. *chillida-mara*.

An evergreen tree with white flowers found in the ghaut forests. The seeds are harmless and have the singular property of clearing muddy water, if it is poured into a vessel of which the sides have been rubbed with bruised or sliced seeds.

APOCYNACEÆ—

1. *Carissa carandas*, Can. *karavadi*.

A common shrub in scrub jungle useful for fences. The berries are eaten and preserved and pickled.

2. *Plumeria acuminata*, Can. *kádu-sampige*.

Grows wild, and is also grown as an ornamental tree in gardens. The flowers have a strong sweet scent, and branches of young trees are used for hedges.

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GENERAL DESCRIPTION.
Flora.

3. *Wrightia antidysenterica*, Can. *kodasige.*

A common shrub or small tree in the forests. The bark is a valuable medicine for dysentery and also a tonic and febrifuge. It used to be imported into Europe under the name of conessi bark.

4. *Wrightia tinctoria*, Can. *hallunóvu-mara.*

A tree somewhat similar to the foregoing, but the bark is comparatively or wholly inert. The leaves are said to be good for tooth-ache, hence its Canarese name.

5. *Cerbera odollam*, Can. *chande-mara.*

A common tree in swamps and on banks of backwaters with a poisonous fruit somewhat like a mango.

6. *Tabernæmontana coronaria*, Can. *maddarasa-mara.*

The juice of the flowers mixed with oil is good for sore eyes and the root for tooth-ache.

7. *Alstoniascholaris*, Can. *hále-mara.*

A common and handsome tree with soft wood. The tree is officinal as an astringent tonic, anthelmintic and antiperiodic.

ASCLEPEDIACEÆ—

1. *Calotropis gigantea*, Can. *ekkamále*, Eng. *gigantic swallow-wort.*

This plant is found in dry places in the district. The root bark dried is the mudar of the Pharmacopœia, which is an alterative tonic, diaphoretic, and in large doses an emetic. It also yields a very strong fibre.

2. *Hemidesmus indicus*, Can. *sugandhi balli*, *námada-beru*, Eng. *country sarsaparilla.*

The root of this plant finds a place in the Indian Pharmacopœia. An infusion of the root is used as a tonic, diuretic and diaphoretic.

LABIATÆ—

1. *Ocimum sanctum*, Can. *tulasi-gida*, Eng. *holy basil.*

This plant is considered sacred to Vishnu, and is found in the courtyard of every Brahman's house in the district. The root and leaves are used medicinally by the natives, but they are not considered effective by European practitioners.

2. *Ocimum basilicum*, Can. *káma-kastúri*, Eng. *sweet basil.*

The plant is aromatic and fragrant. The juice of the leaves is a native remedy for ear-ache, and an infusion of the seeds is a favourite remedy for relieving the after-pains of childbirth.

3. *Ocimum album*, Can. *nai-tulasi.*

4. *Leucas indica*, Can. *tumbe.*

A very common wild flower, or weed.

VERBENACEÆ—

1. *Tectona grandis*, Can. *tégina-mara*, *saguváni-mara*, Eng. *teak.*

Flora.

The teak tree is fairly common in the deciduous forests of the Kásaragód and Uppinangadi taluks, and is found here and there elsewhere, especially in the Mangalore taluk. Teak and blackwood are the two most valuable timbers of the district.

2. *Gmelina arborea*, Can. *kashmiri-mara*.

This tree is generally distributed throughout the district. The wood is light, but strong and useful. The tree grows to a considerable size.

3. *Vitex negundo*, Can. *bilénekki-gida*.

A common small tree or shrub. The root is used medicinally.

4. *Vitex altissima*, Can. *balage*.

A common tree on the upper slopes of the ghauts. The wood is hard and valuable.

5. *Clerodendrum infortunatum and serratum*, Can. *gantubárange-gida*.

Both these shrubs are found in the forests, and the former is very common. The root is a well-known native medicine in febrile and catarrhal affections.

6. *Lantana aculeata*, Can. *nátahu*.

A recent introduction, as an ornamental flower, but promises to become a widespread weed. It is very common in Mangalore and the neighbourhood, at Niléshwar, and here and there throughout the district.

CONVOLVULACEÆ.—

1. *Ipomœa batatas*, Can. *genasu*, Eng. *sweet potato*.

This common tuber is cultivated throughout the district.

2. *Batatas paniculata*, Can. *nela-kumbala genasu*, *gudda genasu*.

The root is used as a cathartic.

3. *Ipomœa turpethum*, Can. *tigade balli*, Eng. *Indian jalap*.

The root is known to be one of the best purgatives.

4. *Evolvulus alsinoides*, Can. *vishnukránti-gida*.

This plant is very common in rice fields. The leaves, stalks and roots are said to be valuable remedies for fever and dysentery.

5. *Argyrea speciosa*, Can. *samudra-hále*, Eng. *elephant creeper*.

A common climber in the district. The leaves are used for emollient poultices.

6. *Ipomœa maritima*, Can. *adumbu-balli*, Eng. *goat's foot creeper*.

Very common in the sand near the sea-shore.

SOLANACEÆ—

1. *Solanum esculentum* or *melongena*, Can. *badane*, Eng. *brinjal* or *egg-plant*.

The brinjal is cultivated as a vegetable all over the district.

2. *Solanum jacquini*, Can. *kantakári*.

The fruit is considered an expectorant by the natives and given by them for coughs, consumption and asthma.

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3. *Solanum indicum*, Can. *kirigulla-gida*, Eng. *Indian nightshade.*

The root is much used in native medicines.

4. *Datura alba*, Can. *ummatta*, Eng. *white-flowered thorn-apple.*

This is a common plant in Canara as in the rest of India. It finds a place in the Indian Pharmacopœia as an anodyne and antispasmodic, and in over doses a violent poison. Its medicinal, and perhaps even more markedly its poisonous, properties are well known to the natives.

5. *Datura fastuosa*, Can. *kari-ummatta*, Eng. *purple thorn-apple.*

This is closely allied to the preceding, and its properties are similar.

6. *Capsicum frutescens*, Can. *menasu*, Eng. *chilly.*

In the neighbourhood of Mangalore and near Bajpe and Tálepádi on the inland road to Mulki large quantities of chillies are grown during the monsoon by Native Christians in a kind of 'hakkal' cultivation on uplands which have never been levelled for rice cultivation. Throughout the district they are grown to some extent either in hakkal or as a second or third crop in little patches of rice fields.

7. *Nicotiana tabacum*, Can. *hoge soppu*, Eng. *tobacco.*

Tobacco is grown to a very considerable extent in the southern máganés of the Kásaragód taluk, mainly near the coast. The species is called 'natti' in Canarese, and is used for snuff throughout the whole district. A certain amount is also exported to Bombay.

ACANTHACEÆ—

1. *Gendarussa vulgaris*, Can. *karinekki.*

2. *Gendarussa adhadota*, Can. *ádusóge*, Eng. *Malabar nut.*

The bark and leaves of the above shrubs are used medicinally by the natives.

3. *Barleria prionites*, Can. *mullu-górante.*

There are four varieties of this shrub—white, red, yellow and blue. The juice of the leaves is used by the natives for children with fever or catarrhal affections.

4. *Barleria longifolia*, Can. *kolavalike-gida.*

The plant is found in moist places. The root is used as a tonic and diuretic.

5. *Strobilanthus callosus*, Can. *gurige.*

This and other varieties of strobilanthus form the most common undergrowth throughout the forests of South Canara.

BIGNONIACEÆ—

1. *Calosanthes indica*, Can. *ánemungu.*

A small tree of no value as timber. The bark and fruit are used medicinally and for tanning.

2. *Sesamum indicum*, Can. *ellu*, Eng. *gingelly*.

Gingelly is grown to some extent in the district, but not very largely. It is usually cultivated in *kumari* or *hakkal*, sometimes mixed with paddy, and occasionally as a third crop in *bail* fields.

SAPOTACEÆ—

1. *Bassia latifolia*, Can. *ippe*, Eng. *Mhowa tree*.

This tree grows in the Canara forests, but is not very common and the practice usual in other parts of India of making a spirit from the flowers does not prevail in Canara.

2. *Mimusops elengi*, Can. *ranje*.

A large and handsome tree with good wood. Oil is obtained from the seeds, and the root and fruit are used in medicine.

3. *Mimusops obtusifolia*, Can. *hádari*.

The leaves are used medicinally and the fruit eaten.

EBENACEÆ—

1. *Disopyros melanoxylon*, Can. *kari-mara*, Eng. *ebony*.

This species of diospyros yields a fine kind of ebony when the trees are large and old. It is found here and there in the Canara forests, but is not common.

UMBELLIFERÆ—

Hydrocotyle asiatica, Can. *ondelaga*, Eng. *Asiatic pennywort*.

Is included in the Pharmacopœia of India as an alterative tonic, and locally applied as a stimulant. It is believed by the natives to be an excellent remedy for leprosy, and there is no doubt that good results have, in some cases, followed its use.

MENISPERMACEÆ—

1. *Cocculus cordifolius*, Can. *amrita-balli*.

The plant, which is found in the forests, is included in the Pharmacopœia of India as a tonic, antiperiodic and diuretic. It is extensively used by native practitioners.

2. *Cocculus indicus*, Can. *káge-mári*.

The berries of this plant contain a poison and are used for poisoning streams to secure the fish; also for killing crows. An ointment prepared from the powdered berries is included in the Pharmacopœia of India as an insecticide.

3. *Clypea burmanni*, Can. *pádávalli-balli*.

The root is used medicinally by the natives.

MYRISTICACEÆ—

Myristica horsfieldii or malabarica, Can. *kádujajimara*, Eng. *wild nutmeg*.

This tree grows to a large size in evergreen forests. It is most common in the Uppinangadi and Coondapoor forests. The nutmeg and mace known in Canara as 'rámgót' and 'rámpatra' are collected by the Forest Department and sold for remunerative prices.

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ANONACEÆ—

1. *Anona squamosa*, Can. *sitaphala*, Eng. *custard-apple*.

2. *Rollinia sieberi*, Can. *rámaphala*, Eng. *bullock's heart* or *sweet sop*.

Both the above are grown to a small extent for the fruit.

MAGNOLIACEÆ—

Michelia champaca, Can. *sampige*.

This tree is grown for the sweet-scented flowers, which are used at religious and other ceremonials.

CRUCIFERÆ—

1. *Raphanus sativus*, Can. *mulangi*, Eng. *radish*.

Grown for use as a vegetable.

2. *Sinapis juncea*, Can. *sásive*, Eng. *Indian mustard*.

Grown for the seeds which are stated in the Pharmacopœia of India to be an efficient substitute for the black or white mustard, especially for mustard poultices. They are also used for dietetical purposes, and the oil expressed from them is used as a rubefacient.

CAPPARIDACEÆ—

1. *Cleome icosandra*, Can. *kádu-sasive*.

Known as wild mustard and used in the same way.

2. *Cratæva nirvala*, Can. *narumbéle*.

Used by the natives as a stomachic and tonic.

NYMPHACACEÆ—

1. *Nymphæa rubra*, Can. *kenneidile*, *kendávare*, Eng. *red water-lily*.

2. *Nymphœa pubescens*, Can. *neidile*, *távare*, Eng. *white water-lily*.

3. *Nelumbium speciosum*, Can. *távare*, *kamala*, Eng. *lotus*.

The three preceding water lilies are common in ponds and still water all over the district.

PAPAYACEÆ—

Carica papaya, Can. *poppayamara*, Eng. *papaw tree*.

This tree, originally introduced from America, is now commonly grown in Canara as in other parts of India. The fruit is eaten by the natives in curries and pickled. A milky juice from the fruit, especially when unripe, has the property of hastening animal decay, and if freshly killed meat be wrapped in the leaves and then roasted, it is found quite tender. It is said that the same effect is produced by hanging the meat under the tree for two or three hours.

CUCURBITACEÆ—

1. *Cucumis sativus*, Can. *mullusautekai*, Eng. *common cucumber*.

2. *Cucumis utilissimus*, Can. *kargumbala*, Eng. *field cucumber*, *pumpkin*.

Flora.

3. *Cucurbita maxima*, Can. *kumbala*, Eng. *squash gourd.*

4. *Lagenaria vulgaris*, Can. *alábu*, Eng. *white pumpkin, bottle gourd.*

5. *Beninkasa cerifera*, Can. *bilé-kumbala*, Eng. *white gourd.*

6. *Luffa acutangula*, Can. *hiré-kai.*

7. *Trichosanthus anguina*, Can. *patla-kai*, Eng. *snake vegetable.*

8. *Momordica charantia*, Can. *hágala-kai.*

All the above cucurbitaceæ are commonly cultivated as vegetables throughout the district.

9. *Cucumis citrullus or citrullus vulgaris*, Can. *bachchangai*, Eng. *water melon.*

10. *Cucumis melo*, Can. *ibbudlu*, Eng. *melon.*

The water melon is cultivated all over the district, but more in the Coondapoor taluk than elsewhere. The sweet melon is hardly known.

11. *Cucumis pubescens*, Can. *hirimekke.*

This is a wild cucumber which is eaten by the natives.

12. *Cucumis trigonus*, Can. *hávumekke.*

The plant common in Canara is probably the Cucumis trigonus and not the Citrullus colocynthus. The properties are said to be the same as those of the Officinal colocynth.

MALVACEÆ—

1. *Hibiscus esculentus*, Can. *bende-kai*, Eng. *lady's fingers.*

One of the most common vegetables in Canara as in other parts of South India.

2. *Hibiscus sabdariffa*, Can. *pundisoppu*, Eng. *roselle, red sorrel.*

3. *Hibiscus cannabinus*, Can. *phindisoppu*, Eng. *duccani hemp.*

The leaves of the above are eaten as vegetables, also the fleshy calyx and capsules of the Hibiscus sabdariffa. A good fibre is got from both.

4. *Hibiscus rosa sinensis*, Can. *dásanige*, Eng. *shoe-flower.*

This well-known flower is grown freely in gardens.

5. *Hibiscus abelmoschus*, Can. *kád kastúri*, Eng. *musk.*

This plant with its sulphur-colored flowers, dark crimson at the base, is very common in the forests. The fibre is very strong.

6. *Thespacia populnæ*, Can. *adavi bende*, Eng. *portia tree.*

A handsome tree with yellow flowers with a red dye. It yields a good timber.

7. *Gossypium indicum*, Can. *hatti*, Eng. *cotton.*

Cotton is grown only in the Kumaris of the southern máganés of the Kásaragód taluk.

STERCULIACEÆ—

1. *Bombax malabaricum*, Can. *búrugada*, Eng. *red cotton tree.*

CHAP. I. GENERAL DESCRIPTION. — Flora.

A very large and common tree with red flowers. The wood is of no value, but the cotton from the pods is used for stuffing pillows, cushions, &c.

2. *Helicteres isora*, Can. *kóle-nár bhutakaralu-mara.*

A small tree or shrub very common in the forests. A coarse fibre prepared from the bark is much used instead of rope by those who live near the forests.

3. *Sterculia alata*, Can. *doddole.*

A very large and common tree with soft and useless wood.

DIPTEROCARPACEÆ—

1. *Vateria indica*, Can. *dhúpadamara.*

A large and handsome tree well suited for avenues, for which they have been planted all over Canara. The finest old 'dhúpa' avenue in the district is between Mudbidri and Karakal and thence up to the Rámsamudra lake. A piney gum is got from the tree known as 'white dammer' and an excellent varnish can be made from it, but the timber is of little value. A solid oil obtained from the seeds is known as vegetable tallow and is used as a local application in chronic rheumatism, &c.

2. *Dipterocarpus indicus*, Can. *maradayenne-mara.*

A tree found in the south-eastern part of the Uppinangadi taluk, from which a wood oil is obtained, which is much valued for varnishing furniture and the wood work of houses.

CLUSIACEÆ—

1. *Calophyllum inophyllum*, Can. *honne*, Eng. *alexandrian laurel.*

This is very common, especially near the coast, as it grows well in sandy soils. The wood is good and a lamp-oil is made from the seeds.

2. *Calophyllum elatum*, Can. *sri-honne.*

A very tall and straight evergreen tree, common in the ghaut forests, much used for masts and spars under the name to poon-spar. Dug-out boats of this tree are also considered the most lasting and are often procured of great size.

3. *Garcinia pictoria*, Can. *járigehuli*, Eng. *Mysore gamboge tree.*

A fairly common evergreen tree which yields a good gamboge.

4. *Garcinia purpurea*, Can. *murgina huli-mara.*

This tree is common in evergreen forests. A solid oil known as 'kokam butter' is obtained from the seeds and used in medicine and cooking.

5. *Mesua ferrea*, Can. *nága sampige.*

A handsome tree with fragrant flowers. An oil obtained from the seed is used in medicine and for lighting.

AMANTIACEÆ—

1. *Citrus decumana*, Can. *chakóra*, Eng. *shaddock.*

2. *Citrus medica*, Can. *mahaphala-gida*, Eng. *citron.*

Flora.

3. *Citrus bergamia*, Can. *nimbe-mara*, Eng. *lime*.

All the above are grown to some extent for the fruit.

4. *Ægle marmelos*, Can. *bélapatre-mara*, Eng. *bael tree*.

5. *Feronia elephantium*, Can. *bélada-mara*, Eng. *wood-apple tree*.

The above two trees are somewhat similar, and the fruit of both is used medicinally in cases of diarrhœa and dysentery. The bael fruit finds a place in the Pharmacopœia of India, but the medicinal properties of the wood-apple are much inferior and the frequent substitution of the latter for the former in hospital supplies has led to the bael fruit being treated with neglect. A gum resembling Gum arabic is got from the wood-apple tree. Neither are very common in the district, as a drier climate suits them better.

6. *Bergera kœnigii*, Can. *karibévu*, Eng. *curry-leaf tree*.

The leaves are much used to flavour curries and add to their digestibility. The bark, root and leaves are much used in native medicine as a tonic and stomachic and have been favourably reported on by European practitioners. An oil is made from the seeds.

SAPINDACEÆ—

Sapindus emarginatus, Can. *aradála*, Eng. *soap-nut tree*.

The fruit is used as soap.

RHAMNACEÆ—

1. *Zizyphus œnoplia*, Can. *surimullu*.
2. *Zizyphus xylopyrus*, Can. *kotta-mara*.
3. *Zizyphus jujuba*, Can. *bogari-mara*, Eng. *jujube*.

The fruit of the Zizyphus jujuba is very good to eat.

EUPHORBIACEÆ—

1. *Emblica officinalis*, Can. *nellimara*, Eng. *emblic myrabolan*.

This tree is very common in scrub jungle all over the district. The fruit is sometimes pickled, and it is used as an astringent in bowel-complaints.

2. *Ricinus communis*, Can. *haralu*, Eng. *castor-oil plant*.

The castor-oil plant is grown in *kumari* lands and as a garden crop. There are two varieties. The medicinal oil is obtained from the small-seeded variety. The other oil is used for lamps, &c.

3. *Jatropha curcas*, Can. *kádharalu*, Eng. *physic nut or wild castor-oil plant*.

An oil is expressed from the seeds which differs from castor-oil in its slight solubility in alcohol. It is a very much more powerful purgative than castor-oil, but very uncertain in its action. It is used for hedges, as cattle do not eat it.

4. *Jatropha manihot*, Can. *kanagala-mara*, Eng. *tapioca* or *bitter cassava plant*.

CHAP. I. GENERAL DESCRIPTION. Flora.

This plant is grown to a small extent in Canara, but no tapioca is made from it.

5. *Macaranga indica*, Can. *uppalige-mara*.

A large and tolerably common tree of little value.

6. *Euphorbia tirucalli*, Can. *kalli*, Eng. *Indian tree spurge*.

7. *Euphorbia nivalia*, Can. *ele-kalli*.

8. *Euphorbia antiquarum*, Can. *chatura-kalli*, Eng. *triangular spurge*.

The first of the above three is a somewhat common hedge and the others are varieties of it. They all abound in an acrid milky juice.

9. *Acalypha indica*, Can. *kuppi-gida*.

The expressed juice of the leaves is a valuable emetic for children, and the root is used as a purgative.

10. *Tragia involucrata*, Can. *dúlagondi*.

A twining plant covered with stinging hairs. The root is used medicinally.

ANACARDIACEÆ—

1. *Mangifera indica*, Can. *mávina-mara*, Eng. *mango*.

Mango trees are very common in Canara, and of late years considerable additions have been made to the number of good graft trees near Mangalore.

2. *Spondias mangifera*, Can. *ambata-mara*, Eng. *hog-plum* or *wild mango*.

A very large tree. The fruit is eaten by deer and also pickled.

3. *Anacardium occidentale*, Can. *géru-mara*, Eng. *cashew-nut tree*.

This tree, originally introduced by the Portuguese from South America, is now widely spread over the district. It will grow on any soil and requires no care. The nut is largely exported as well as used locally, and a spirit is made from the fruit. The pericarp of the nut contains a black acrid oil, and an edible oil is expressed from the nut.

4. *Semecarpus anacardium*, Can. *géru-kái-mara*, Eng. *marking-nut tree*.

The black juice of the fruit is used for marking linen and medicinally.

COMBRETACEÆ—

1. *Terminalia tomentosa*, Can. *banapu, matti*.

A fine large very common tree, of which the timber is a great favourite with the people of Canara for building and other purposes.

2. *Terminalia paniculata*, Can. *maruva*.

Also a large and common tree. The wood is good, but not equal to that of the Terminalia tomentosa.

3. *Terminalia chebula*, Can. *anile*, Eng. *myrabolan*.

Yields the true myrabolan. It is fairly common in the Coondapoor taluk, in which many of the forests are at a good elevation. It is not nearly so common further south.

4. *Terminalia bellerica*, Can. *shánti*, Eng. *belleric myrabolan*.

A large and handsome tree; but the wood is of no value, and the myrabolans scarcely cover the cost of collection.

ALANGIACEÆ—

Alangium decapetalum, Can. *ankólé-mara*, Eng. *sage-leaved ala regium*.

The wood of this tree is good. The fruit, an astringent acid, is eaten by the natives and the root is used medicinally.

LYTHRACEÆ—

1. *Lagerstrœmia microcarpa*, Can. *bili-nandi*, *bolandúr*, Eng. *benteak*.

A common and handsome tree found all over the district. The wood is very good for house-building, but, if exposed, it decays soon and is liable to be attacked by white ants.

2. *Lagerstrœmia reginæ*, Can. *dásál*.

A handsome tree with rose-coloured blossoms. The wood is not so good as that of the preceding.

MYRTACEÆ—

1. *Psidium pyriferum*, Can. *jámphalada-mara*, Eng. *white guava*.

2. *Psidium puriferum*, Can. *góva-mara*, Eng. *red guava*.

The above are grown to some extent in gardens for the fruit, but neither are common.

3. *Eugenia jambolana*, Can. *néralu*.

4. *Eugenia jambosa*, Can. *jambunéralu*.

5. *Eugenia malaccensis*, Can. *kempu-jambu-néralu*.

The fruit of the above is eaten.

6. *Careya arborea*, Can. *daddálada-mara*.

GRANATACEÆ—

Punica granatum, Can. *dálimbe*, Eng. *pomegranate*.

The pomegranate is grown to a small extent in gardens.

ROSACEÆ—

Rosa centifolia, Can. *gulábi*, Eng. *rose*.

PAPILIONACEÆ—

1. *Dolichos biflorus*, Can. *huruli*, Eng. *horse gram*.

Horse gram is grown to some extent all over the district, but more in the Udipi and Mangalore taluks than elsewhere, as a

CHAP. I. GENERAL DESCRIPTION.

Flora.

second crop in Majal fields and also in 'hakkal' cultivation on uplands.

2. *Phaseolus mungo*, Can. *hesaru*, Eng. *green gram.*

3. *Phaseolus roxburghii*, Can. *uddu*, Eng. *black gram.*

4. *Dolichos lablab*, Can. *avare.*

These are grown to a small extent chiefly as a second crop in sandy soils near the coast.

5. *Cajanus indicus*, Can. *togari*, Eng. *pigeon-pea.*

Grown in 'kumari' and 'hakkal' cultivation and in gardens.

6. *Vigna catjang*, Can. *alasande*, Eng. *cow gram.*

Grown chiefly as a vegetable in gardens.

7. *Cassia occidentalis*, Can. *dodda togache.*

Found throughout the district. The leaves are believed by the natives to be good for skin diseases.

8. *Abrus precatorius*, Can. *gulaganji-balli*, Eng. *wild liquorice.*

An efficient substitute for the ordinary liquorice.

9. *Mucunna pruriens*, Can. *nasugunni balli*, Eng. *cowhage.*

Recognised as an anthelmintic in the Pharmacopœia of India.

10. *Clitorea ternatea*, Can. *shankapushpa.*

A common and pretty climber. The seeds are used as a purgative.

11. *Phaseolus rostratus*, Can. *káduhesaru.*

The roots of this wild plant are eaten by the natives, and it is also used medicinally.

12. *Atylosia candollei*, Can. *kád-togari.*

A very common shrub in almost all the forests of the district.

13. *Crotolaria juncea*, Can. *sanabu*, Eng. *sunn hemp.*

Cultivated to some extent for the fibre which is used for fishing nets and lines. The climate and soil of Canara seem to be favourable for the growth of this fibre-producing plant.

14. *Dalbergia latifolia*, Can. *biti*, Eng. *blackwood.*

One of the most valuable timbers in India. Found all over the district, but especially in the Coondapoor and Uppinangadi taluks.

15. *Adenanthera pavonina*, Can. *manjatti.*

A large handsome and fairly common tree which yields a good wood.

16. *Butea frondosa*, Can. *muttaga*, Eng. *bastard teak.*

A handsome tree with red flowers. The seeds are highly thought of as a febrifuge by native practitioners. The wood is poor.

17. *Tamarindus indica*, Can. *hunise*, Eng. *tamarind.*

The tamarind tree is not common in the Canara forests, and is not grown by the people as extensively as in the East Coast.

18. *Erythrina indica*, Can. *hangarakana*,

A common tree with red flowers and soft wood. These trees are extensively used as posts for picottahs in South Canara.

Flora.

19. *Cassia fistula*, Can. *kondé*.

A handsome tree with hanging branches of yellow flowers. The wood is good and the pulp round the seeds is used as a laxative.

MORINGACEÆ—

Moringa pterygosperma, Can. *nugge*, Eng. *drumstick tree*.

This tree produces the 'drumsticks' used in curries. The root which possesses the pungent taste and smell of the English horse radish is used medicinally.

MIMOSACEÆ—

1. *Acacia catechu and sundra*, Can. *káchu*.

These trees are found in abundance in the Coondapoor taluk, and the Forest Department derives about Rs. 1,500 a year from the manufacture of catechu or the thickened juice of the boiled wood.

2. *Acacia concinna*, Can. *shige*.

The pods resemble soap-nut and are used in the same way. There is a good crop every second year, and the Forest Department gets a considerable revenue from it.

3. *Acacia speciosa*, Can. *báge*.

This tree yields a considerable quantity of gum and the wood is good.

4. *Entada monostachya*, Can. *hallekáiballi*.

A large creeper with immense sword-like pods.

5. *Mimosa pudica, Can. náchike-gida*, Eng. *the sensitive plant*.

Filices.

The ferns of South Canara are very numerous, amongst those frequently met with may be mentioned—

Adiantum lunulatum.
Adiantum caudatum.
Davallia termifolia.
Pteris geraniifolia
Pteris acquilina
Gymnopteris feei.
Lygodium scandens.
Lygodium flexuosum.
Lygodium dichotomum.
Botrychium virginicum.
Gleicherá dichotoma.
Ceratopteris thalictroides.
Osmunda regalis.
Osmunda javanica.
Nephrodium molle.
Nephrodium extensum.
Nephrolepis tuberosa.
Lastrea aristata.
Lastrea sparsa.
Lastrea ochthodes.
Polystichum auriculatum.
Polystichum angulare.
Actiniopteris radiata.
Asplenium (several varieties).
Callipteris esculenta.
Pleopeltis oxyloba.
Pleopeltis membranacéa.
Pleopeltis tridactyla.
Pleopeltis hemiontidea.

CHAP. I. GENERAL DESCRIPTION.

Filices.

Niphobolus.
Drynaria quercifolia.
Cheilanthes termifolia.
Cheilanthes farinosa.
Polybotrya appendiculata.
Polybotrya asplenifolia.
Stenochlæna scandens.
Acrostichum aureum.
Blechnum orientale.

The *Adiantum caudatum* is to be seen on every mud wall in the district during the monsoon, and the bushes fringing streams and tanks are covered with the pretty little climbing fern, *Lygodium scandens.* Beautiful banks of the *Osmunda regalis* are to be found beside the rivers in the ghaut forests and in the Hannar Mágane above the ghauts.

Fauna—Wild animals.

The great extent of forest land in South Canara affords a safe retreat to wild beasts of almost every kind and description generally found in Southern India, but the ghaut forests are the especial home of the bison (*Gavæus gaurus*), which is to be found all along the line of ghauts from north to south, and in the Uppinangadi taluk at certain seasons as far as 20 miles from the foot of the ghauts. Owing to the objection on the part of all but the lowest classes of Hindus to eat the flesh of an animal so closely allied to the cow, they are not much shot by other than Muhammadan natives. European sportsmen generally prefer to go after them in the forest during the rains, or shortly after, when they can be tracked by their footsteps in the soft ground, and the fallen twigs and leaves are not so dry as to crackle when trodden on. In the open grass land on the slopes, or on the top of the line of ghauts they can be stalked all the year round in the early morning or in the evening. Occasionally the forests are beaten for them, but the chance of success is much less in this way than in those others before mentioned, while the sport is not nearly so exciting. It is, however, the only way in which they can be got on the plains in the dry weather. Next in size to the bison comes the sambar (*Rusa aristotelis*), a magnificent stag, which not unfrequently stands fourteen hands high, and affords good sport to the stalker on the upper slopes of the ghauts. Low down, owing to the continuous forest, it can only be got by beating the jungle, and as large numbers are shot by the natives, but poor sport is now to be got in this way. In the more open jungle to the west of the large ghaut forests there are still herds of spotted deer (*Axis maculatus*), and occasionally the muntják, jungle sheep, or barking deer (*Cervulus aureus*). The little mouse deer (*Memimna indica*) is also very common in the ghaut forests. From the absence of extensive open plains it is not to be wondered at that there are no antelope in the district, but the precipices near the *Kudre Mukh* and in other parts of the Western Ghauts would seem to offer a desirable home for the ibex or Nílgiri wild goat. None

however, are to be found, and it may be that the heavy rainfall is too much for them.

Fauna—Wild animals.

The tiger (*Felis tigris*) and the cheeta or leopard (*Felis pardus*) both abound, and notwithstanding liberal rewards which lead to the annual destruction of a considerable number of these animals, the loss of cattle from their depredations is very great indeed compared with other parts of the presidency, owing no doubt to the way in which forest and cultivated land are here intermixed. The loss of agricultural stock to the people from this cause is not, however, so great as might be inferred from the figures in returns, as a large number of the cattle killed are worn out and diseased animals that have practically been left to their fate by their owners. Jungle cats of many kinds are common, and there is also the wild dog (*Cuon rutilans*) with, of course, the jackal and the hyæna. The black bear (*Ursus labiatus*) is found near the Kudre Mukh, at Nagodi in the Coondapoor taluk, and probably at some other places on the line of ghauts at an elevation of 2,000 feet and upwards.

All the common monkeys of Southern India are found in South Canara and occasionally the strange little lemur (*Loris gracilis*).

Elephants have a permanent home only in the extensive forests of the Uppinangadi taluk, but a small herd lately made its way through the Mangalore taluk up to the north of the Udipi taluk. Under the measures which have recently been adopted for their protection, and the greater immunity from disturbance afforded by the abolition of '*kumari*' cultivation in the forests, elephants have become more numerous and more daring, and much damage is often done by them to the cultivation adjoining the larger forests. Not only are rice fields trampled down, but an areca-nut plantation, which has taken years to rear, is sometimes destroyed in one night, the elephants delighting in pulling down the trees and tearing them open to eat the pith. There are one or two 'rogues' about, one being known to have killed several men. As in South India generally the only other pachyderm is the common jungle pig (*Sus indicus*), which flourishes wherever there is forest or even good scrub jungle.

Amongst *rodentia* the most handsome is the large red squirrel (*Sciurus elphenstonei*) which abounds in all the ghaut forests, and the most remarkable is the flying squirrel (*Pteromys petaurista*) which one comes across but rarely, owing to its nocturnal habits.

The porcupine (*Hystrix leucura*) is common enough, and the Indian scaly ant-eater (*Manis pentadactyla*) is not infrequent. Otters are to be found in most of the larger rivers. The flying fox (*Pteropus medius*) has established flourishing colonies at Kumbla and Mudbidri.

CHAP. I. GENERAL DESCRIPTION.

Domestic animals.

The domestic animals reared in the district are by no means remarkable specimens of their class. The stock is inferior and the cattle are of a small stunted breed without any pretensions either to size or working powers. There are no regular breeders in the district, and the cultivators are consequently dependent to a very great extent upon the annual cattle fair held at Subramanya in the Uppinangadi taluk, for their supply of draught bullocks, buffaloes and cow-buffaloes which are brought thither from above the ghauts. It is computed that nearly 50,000 head of cattle are thus brought from Mysore and disposed of to ryots from all parts of South Canara. The damp climate of the country does not seem to be favorable to animal life and even the cattle imported from above the ghauts often become sickly within a few years of their arrival in the district. Milch cows and goats are procurable in the district, but they, too, are ordinarily poor stunted creatures. From the month of January till the commencement of the rainy season, pasture is scanty, and such cattle as are at all cared for are supported by means of stored fodder. A poor hay is sometimes made of the long grass which grows naturally on some hills and laterite plateaus that are kept clear of bushes for the purpose, and this hay is given to the cattle after being chopped and boiled with rice husks; rice straw being added at night. During the rainy season pasture is abundant and cattle are ordinarily left to graze on the hills and plains. Oil-cake, gram and cotton seed are also given to cattle in addition to other kinds of food by those who are careful of their stock, but the country cows, as a rule, give but a small quantity of milk, and butter and milk are consequently dear articles in South Canara. Cow-buffaloes are largely kept by the people, as they give more milk than cows. Epidemic diseases among cattle are sometimes very destructive. No horses, sheep or donkeys are bred in South Canara, and even ponies of the ordinary country breed of Southern India are not reared. Those who eat mutton are entirely dependent upon Mysore for their supply of sheep which are brought down the ghauts in considerable numbers. Pigs of the common country breed are kept mostly by Native Christians and the lowest classes of Hindus. Pariah dogs swarm in every village, except amongst the Mápillas and are of some service in guarding fields and vegetable gardens from the inroads of wild beasts. Almost every household possesses a cat. Fowls are to be found in the houses of all classes of people except Brahmans. Great attention is paid to the rearing of cocks by Billavas and Bants, among whom cock-fighting is a favourite pastime. It is also a custom among these and some other classes to propitiate the small-pox goddess 'Mári' by decapitating cocks in front of her idol. The head having thus been

sacrificed, the body is taken home by the worshipper and eaten. Turkeys and ducks are imported into Mangalore from Goa and Cochin during the fair season.

Reptiles.

The largest of the South Canara reptiles is of course the crocodile which is to be found in almost all the larger rivers. Owing probably to the rivers being much smaller, the crocodile in Canara neither attains the same size as in Malabar nor is it nearly so destructive. In fact such a thing as a man being killed by a crocodile in Canara is almost unknown. Next in size and first in importance come the snakes, to whom upwards of 150 lives are annually lost. For reasons well known attempts to extirpate snakes by the offer of rewards have had to be abandoned and so long as these reptiles, especially the cobra, are held in such veneration as they now are by all Hindus, their speedy extinction can hardly be hoped for. The ordinary snakes of Canara are much the same as in other parts of Southern India, but the Indian python or boa-constrictor is more common here than in most other districts, and is sometimes found of an enormous size in the ghaut forests, where there is also a bamboo-coloured variety of the cobra. The pretty little harmless green whip snake (*Passerita mycterizans*) is everywhere common. Amongst minor reptiles a peculiar species occasionally to be met with in South Canara is the *Draco dussumieri*, commonly called the flying lizard.

Insects

South Canara, like all eastern countries in which there is a heavy rainfall, abounds in insects. Amongst those which come prominently to notice may be mentioned the cicada or knife-grinder, whose ceaseless whirring is ever on the ear of those who frequent the forests. Butterflies and moths are found in great variety, and there is a considerable number of the *mantidæ* or leaf insects, as well as of the still more peculiar *phasmidæ* or stick insects that resemble dry twigs. The only economically valuable species of insect is the bee which is not domesticated, but is very common in the jungles and on the hills in a wild state. They are of four different kinds, the largest being called in Canarese *togar-jénu*. Some of them build on the higher branches of the loftiest trees or in the clefts of rocks which render the honey-combs difficult of access. The smallest of the species hives in the hollows of the trunks of old trees, and the honey collected by it is much prized for its supposed medicinal properties.

Birds.

The birds of South Canara do not differ materially from those which are generally found in Southern India. Pea fowl, jungle fowl, and spur fowl abound in the forests, but they are difficult to get at, and partridges are rarely found at all. Of pigeons, there are several kinds, including the large imperial pigeon, but the most common of all the edible birds are the doves, of which

CHAP. I. GENERAL DESCRIPTION.

Birds.

many kinds are to be found almost everywhere. Several varieties, both of pigeons and doves, are remarkable for very beautiful plumage. Snipe come in fair numbers in the cold weather, but they are very widely distributed and a large bag is, as a rule, difficult to get, though at times they are met with in very large numbers in some favourite spot, such as a young cocoanut garden, and then a good shot can secure a large bag very quickly. Plovers of sorts are found in large flocks near the coast and on the backwaters, and the lapwing all over the district. Golden plover are somewhat rare. Duck and teal are not very numerous, but there are great quantities of waders of many different kinds including the curlew and the whimbel. The song birds, and those harsh of voice but of beautiful plumage, are much the same as are met with in other well-wooded parts of the country.

Fishes.

In all the rivers of South Canara there are abundance of mahseer, which run up to about 15 lbs. in weight in the larger rivers. The stock would be much larger were it not for the poisoning and indiscriminate netting which goes on. A good deal has been done in the way of stopping the former, but it is still carried on in secluded spots, and the law does not at present permit of any interference with the netting which is carried on in the dry season, when the fish are congregated in the large pools well inland. Poisoning and netting notwithstanding, there are still large numbers of mahseer in the rivers and fine sport with the rod is to be got at Sampaji, Subramanya, Sirádi, Sisila, Neriya, Charmádi and elsewhere. Besides mahseer (*Barbus mosal* and *Barbus tor*), called *peruval* in Canarese and Tulu, there are many other fish in the Canara rivers, of which the following are said by Mr. Thomas to attain a size of upwards of 1 foot in length :—

Labeo calbasu—Kari mínu.
Labeo (new species)—Muḷ-vél.
Barbus labecula—Kaṭláḍi.
Barbus carnaticus—Ṣé-mínu.
Barbus conirostris—Kúrli.
Gobius giurus—Abrôṇi.
Ophiocephalus striatus—Huli kuch-chi.
Ophiocephalus diplograme—Kuch-chi.
Ophiocephalus marulius—Maḍánjí.
Pseudobagrus chryseus—Shéḍe.
Callichrous checkra—Bále.
Muræna maculata—Mari.
Mastacemblus armatus—Puriyôl.

All the above are freely eaten by almost all classes, but in the Uppinangadi taluk many Hindus will not eat the peruval or

Fishes.

mahseer, as it is treated as a sacred fish at Subramanya, Sisila and other temples. Objection is also taken by some people to the *Ophiocephalus*, as they think it is somewhat too like a snake. The small fish are too numerous to enumerate in detail, but the *Barilius canarensis* (pachilé jabbu) and *Barbus filamentosus* (black spot) may be mentioned as rising freely to fly, the former in the small rapids and the latter in stiller water. Besides the large fresh-water fish mentioned, the *Chanos salmoneus* is found up to 3 feet in length in a slightly brackish pond at Coondapoor. It is however really a sea fish and other well-known 'backwater' fish are found in the same pond. The fishing or rather netting of this pond is a singular sight. Two or three times a year at the discretion of the Head Assistant Collector residing at Coondapoor, a number of boats are brought to the pond and arranged in a line with drag nets falling to the bottom and stretching right across the pond, while another set of nets are held up in the air by men standing in the boats. The whole line is then moved gradually forward with much shouting and beating of the boats, and, as the fish get closed in towards the other end of the pond, a most exciting scene arises, the air being literally alive with large silvery fish, many of which succeed in leaping right over the nets, though the majority strike against them and fall into the boats where they are secured. An incautious boatman is also occasionally knocked clean into the water.

Amongst sea and estuary fish the pomfret, black and white, the seer, the mullet and the whiting are the favourites at European tables, but the species caught in the greatest abundance are the Indian pilchard (*Sardinella neohowii*) and the Indian mackerel (*Scomber kanagurta*), both of which are often found in such numbers that a large surplus remains for use as manure. Now that the old fashioned rough curing with salt-earth has been put a stop to, the fish-curing yards provided by the Salt Department are gradually being resorted to and a brisk trade in salted mackerel appears to be springing up. Great numbers of seer and other larger fish are also caught by Ratnagiri fishermen in the open sea and brought to the South Canara yards to be cured. Besides the comparatively fine class of fish above mentioned, numbers of coarse fish, such as the dog-fish (*Mustelus teris*), the ray (*Trygon namak*), and the hammer-headed shark (*Cestracion cygræna*) are eaten by the poorer classes of natives.

Oysters are met with all along the coast, the best being, perhaps the small oysters on the rocks about the islands off Udipi, and the large oysters at Coondapoor and in the backwater at Mogral near Kumbla in the Kásaragód taluk.

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A fair-sized whale was thrown up on the shore a few years ago, and the skin and skeleton were sent by Mr. Thomas to the Central Museum at Madras, where the skeleton may now be seen.

Geology and mineralogy.

With regard to the geology of South Canara, there is absolutely no official information on record. In the Geological map of India of 1877, it is said that the Malabar Coast, which includes South Canara, is chiefly composed of laterite, beneath which in places tertiary rocks occur, but the under-lying formation is believed to be chiefly metamorphic. With regard to the laterite it is elsewhere said that from its position it is presumably of sedimentary marine origin, but it is impossible to be quite certain till the country has been examined by some competent geologist. Later investigations in Travancore and elsewhere, however, seem to point to a different conclusion.

The Western Ghauts, which skirt Canara from north to south, are undoubtedly gneissic, and the following extracts from a paper on Travancore by Mr. King, Deputy Superintendent of the Geological Survey Department, are probably in great measure applicable to South Canara :—

"The gneisses are generally of the massive grey section of the "series, that is, they are nearest to the rocks of the Nílgiris, though "they differ from them in being coarse-grained or more largely "crystallized, and in being generally quartzose rocks.

"So quartzose are they, that there are, locally, frequent thin "beds of nearly pure quartz rock which are at times very like reefs "of vein-quartz. Often these beds are strongly felspathic, the "felspar occurring among the quartz in distinguishable grains, or "larger crystalline masses, giving the rock rather a granitic "appearance. The only other region, where I know of somewhat "similar beds of quartz rock occurring with other gneisses, is in "the schistose region of the Nellore district. There, however, "the quartz rock becomes often a fine compact quartzite; here, "in Travancore, there are no approaches to such compact forms.

"The common gneisses are felspathic quartzose varieties of "white or grey colours, very largely charged with garnets. A "particular form of them is an exceedingly tough, but largely "crystallized, dark-grey or greenish felspathic rock.

"Massive hornblendic gneisses are not common. Indeed, "hornblende may be said to be a comparatively rare constituent "of the Travancore gneisses.

"All the gneisses are more or less charged with litaniferous "iron in minute grains; they are likewise—only more visibly—as

CHAP. I. GENERAL DESCRIPTION. Geology and mineralogy.

"a rule, highly garnetiferous. In fact, one might say, that Tra- "vancore is essentially a country of garnetiferous gneisses. The "garnets themselves are only locally obtainable, it being impossible "to break them from the living rock, while they are generally de- "composed or weathered. They are generally of small size, but "are very rich in colour, the precious garnet being very common. "Other minerals, such as red, blue, and yellow sapphire and "jacinth, are found among the garnet sands so common on the "sea-shore at certain places. The sea-sands are also full of "litaniferous iron grain. While on this subject, I may instance "the beautiful and long known constitution of the shore sands at "Cape Comorin, where, on the beach, may be seen the strongest- "coloured streaks or ribbons, of good width, of bright scarlet, black, "purple, yellow and white sands of all these minerals and the "ordinary silica.

"As will be seen further on, an enormous quantity of fer- "ruginous matter is collected among certain forms of weathered "gneiss and other rocks, the source of which is hardly accounted "for in the apparent sparse distribution of iron in the gneisses. "After all, however, an immense supply of ferruginous matter "must result from the weathering of the garnets, when we consider "that they are so generally prevalent in all the gneisses, and "crowdedly so in very many of them.

. . . . . .

"The great feature about the gneisses in Travancore, and "indeed also in Cochin and Malabar,. is their extraordinary "tendency to weather or decompose, generally into white, yellow, "or reddish felspathic clayey rocks, which, in many places and "often very extensively, ultimately become what is here always "called laterite. The evidences of this are, after all, only well "seen in the field; but it may be stated here that these are seen "principally in the constituent minerals, mainly the quartz, being "still identifiable in much of the rock; in the lamination or "foliation being also traceable; in the gradual change from the "massive living rock to the soft and finally hard, scabrous, and "vermicular ferruginous clayey resultant called laterite; and in "the thin, pale, and poorly ferruginous forms exhibited by the "weathering and alteration of the more felspathic and quartzose "gneisses.

"This altered form of the weathered gneiss occurs over a "definite area, which I have laid down approximately in the map. "At the same time, the change from unweathered gneiss to this "belt is not sharp; for long before the eastern limit of the more

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"generally lateritized belt is reached, approaching it from the "mountain zone, the great change has begun.

"Very soon after one begins to leave the higher ribs of the "mountains and to enter on the first long slopes leading down to "the low country, the gneiss begins to be weathered for some "depth into a clayey rock, generally of pale colours, streaked and "veined with ferruginous matter, and having always an appreci- "able upper surface of scabrous or pisolitic brown iron clay, which "is, of course, probably, largely the result of a ferruginous wash "and, less so, of ferruginous infiltration. Also the ferruginous and "lateritoid character is devolved to a certain extent according to "the composition of the gneisses; but, on the whole, there is no "doubt that the upper surface generally over large areas is lateri- "tized to a certain depth irrespective of the varying constitution of "the strata.

"Then, as the rocks are followed or crossed westward, the "alteration becomes more frequent, decided, and deeper seated "though still, all over the field, ridges, humps, and bosses of the "living rock rise up from the surrounding more or less decomposed "low-lying rock areas.

"This generally irregular and fitfully altered condition of the "gneisses begins at an elevation of about 400 feet above the sea, "and thus it extends as a sort of fringe of varying width along "the lower slopes of the mountains.

"At a yet lower level, say from 200 to 150 feet, and so "nearer the sea-coast, there is a better defined belt of more "decidely lateritized form of weathered gneiss, in which the "unaltered rock occurs less frequently, and then always in more "or less flatly rounded humps and masses, which never rise above "a general dead level. This belt is, in fact, a country of undulat- "ing downs (where free from thick and lofty jungle), or tolerably "uniform level stretches of forest land. Occasionally it also shows "a plateau surface, or it is broken into small and low flat-topped "hills. Always it is very deeply indented by river and stream "valleys, or even by some of the backwaters which have high and "steep shores.

"Further northwards the plateau character of the lateritic "gneiss belt is very well developed in Malabar.

"It is remarkable of this coastal belt of country that its laterite "(an altered, or ferruginously infiltrated condition of weathered or "decomposed gneiss) is not to be distinguished from any other late- "rite, except that which is made up of obviously detrital material.

"Whatever the laterite of Travancore or Malabar may have "been originally, it is a useless form of the rock, being crumbly

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"and soft, as a general rule, and oftener of a red colour than brown. "The character of the climate does, in fact, appear to militate "against the changing of the red peroxide of iron in the rock to the "brown peroxide, during which change the proper cementing and "hardening of the sound rock, such as that on the east coast or in "the Deccan, is evidently brought about.

"The next succeeding rock formations, namely, the Quilon "and Warkilli beds, occur as a very small patch on the coast be-"tween the Quilon and Anjengo backwaters.

"The Quilon beds are only known through the researches of the "late General Cullen, who found them cropping out at the base "of the low laterite cliffs edging the backwater of that place, and "again in wells which he had dug or deepened for the purpose. "I was myself not able to find a trace of them. They are said "to be argillaceous limestones, or a kind of dolomite, in which a "marine fauna of univalve shells, having an eocene *facies*, was "found, and they occur at about 40 feet below the laterite of "Quilon, which is really the upper part of the next group.

"The Warkilli beds, on the other hand, are clearly seen in the "cliffs edging the sea-shore, some 12 miles south of Quilon, where "they attain a thickness of about 180 feet and have the following "succession in descending order:—

Laterite (with sandstone masses).
Sandy clays (or lithomarge).
Sandy clays (with sandstone bands).
Alum clays.
Lignite beds (with logs of wood, &c.).

"The bottom lignite beds rest on loose white sand, and noth-"ing is known of any lower strata.

"It will be seen how this set of strata has an upper portion, "or capping of laterite, which is, however, clearly detrital. On "the landward edge of the field of those Warkilli beds, there is "in places only a thin skin, representative of these upper beds "of laterite grits and sandstones lying directly on the gneiss, "which is itself also lateritized; and it is very hard, as may be "supposed, to distinguish the boundary between the two unless "the detrital character of the former deposits is well displayed. "Thus the upper part of the formation has overlapped the gneiss. "It is also this upper portion which overlies the Quilon beds, "which are also apparently overlapped.

"These Warkilli beds constitute, for so much of the coast, the "seaward edge of the plateau or terraced country above de-"scribed and they present similar features. The Warkilli downs

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"are a feature of the country, bare, grass-grown, long, flat undula-"tions of laterite, with, about Warkilli itself, small plateau hills "forming the higher round 180 to 200 feet above the sea. "These downs, too, and the small plateaus or flat-topped hills, "are partly of the Warkilli laterite and partly of the lateritoid "gneiss.

"Whatever form of denudation may have produced the now "much worn terrace of the gneissic portion of the country, the "same also determined the general surface of the Warkilli beds. "Indeed, it gradually dawned on me while surveying this coun-"try, having the remembrance of what I had seen of the plateaus "and terraced lowland in Malabar in previous years, that here, "clearly, on this western side of India is an old marine terrace, "which must be of later date than the Warkilli beds.

"These are, as I have endeavoured to show in another paper, "of probably upper tertiary age, and equivalent of the Cudda-"lore sandstones of the Coromandel. Hence this terrace must "be late tertiary or post-pliocene, and it marks, like the long "stretches of laterite and sandstones on the eastern side of the "country, the last great or decided elevation of Southern India, "prior to which, as is very probable, the Indian land rose almost "directly from the sea by its Western Ghauts and had an eastern "shore line which is now indicated very well by the inner edge "of the Tanjore, South Arcot, Madras, Nellore, and Godávari "belts of laterite and sandstone.

"Mr. Foote has already generalized in this way for the east-"ern side of Southern India in particular; but, I think, he makes "the elevation too great, including, as he does in his laterite de-"posits, patches of lateritized gravels and rock masses ranging "up to a height of 500 feet at least, which are not so definitely "part and parcel of the proper coastal developments.

"The plateau form of the Coromandel areas has often already "been commented on; but their connection with a terraced form "of marine denudation is more clearly brought out now that the "evident conformation of the Travancore and Malabar lowland is "ascertained.

"The somewhat different level of the surfaces of these plateau "lands on each side of the peninsula is also interesting in so far "as there is an evident, general, very slight, inclination of the "whole to the south-eastward."

Lignite beds, such as those referred to as forming part of the Warkilli beds, have been found in the Kásaragód taluk, and it is probable that they prevail farther north also. Laterite which, whatever may be its origin, has the appearance of nothing more

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than hardened ferruginous red clay, with a perforated or cellular structure, is the ordinary building material of the country. It varies very much in quality, some of it being so soft and friable as to be practically useless, while in other localities it can be safely used even for bridge work if care is used in selection.

The St. Mary Islands off the coast of Udipi are mainly composed of basaltic rocks.

Gold is to be found by washing in a small stream near Mijar in the Mangalore taluk, and near Mádnúr in Kásaragód on the road from Mangalore to Merkára and probably elsewhere.

CHAPTER II.

HISTORY AND ARCHÆOLOGY.

Introductory—Early allusions—Brahmin chronicles and local traditions—Kadamba dynasty—Mayúra Varma and his Brahmin allies—Humcha chiefs—Ráshtrakútas and Chálukyans—Hoysal Ballâls—Bairasu Wodears, Bhútal Pándia—Harihara Raya of Vijayanagar—Ibn Batuta—Abd-er-Razzak—Portuguese settlements—Ikkeri or Bednore dynasty—Della Valle—Petty Jain chiefs—Hegades and Ballâls—Fryer's travels—Arab and Portuguese conflicts—English at Mangalore, 1737—Hyder Ali—Capture of Bednore—Siege of Mangalore—Deportation of Christians—Annexation of Canara by the British, 1799—Buchanan's journeys—Intrigues of Native officials—Coorg war—Archæology—Snake stones—Stone temples—Bettus, colossal statues—Bastis—Stambhas—Forts.

CHAP. II. HISTORY AND ARCHÆOLOGY.

Introductory.

No definite historic record relating to South Canara or Tuluva has been found of earlier date than the eighth or ninth century A.D., but it must certainly at one time have formed part of Kérala, or Chéra, the western of the three ancient Dravidian kingdoms mentioned in king Asoka's rock-cut inscriptions of the third century B.C. The date of the separation of Tuluva from Kérala is not known, but early in the Christian era Kérala was assailed from the north and east by the Pallavas, and afterwards by the early Kadambas, and by 700 A.D., when the Jews settled at Cochin, Kérala seems to have been a comparatively small state within the present Malayalam limits, ruled by a king who had the suffix 'Varma' to his name, the same suffix as was used by the Kadamba, Pallava, and, to some extent, by the early Chálukyan dynasties. The deed granted to the Jews at that time, and others granted to Christians not long afterwards, afford much assistance in the separation of fact from fable in the traditionary history of the west coast, and prior to the introduction of Brahmins under the auspices of Kadamba kings in the eighth century, the early agricultural population of Tuluva seems to have held a subordinate position to the Náyars or Bants, who were the military adherents of the chieftains who ruled as feudatories of an overlord, who, in his turn, recognised some more distant suzerain. The religion of the chiefs was probably Jainism, but the great mass of the people were then, as now, practically demon worshippers. As time passed on, and the dominant class increased in numbers, the

distinction between the classes became more and more marked, the process being, no doubt, greatly aided by the caste rules introduced by the Brahmins who were brought in by a Kadamba king, Mayúra Varma, about the middle of the eighth century, and the old proprietors of the soil gradually became mere agrestic slaves to the military classes and their priestly allies, an intermediate position being held by the artisan classes and the Billavas or toddy-drawers. Everywhere throughout Southern India traces are to be found of polyandrous habits amongst the early Dravidian races, a state of things which no doubt made it easy for the military immigrant classes to contract alliances with the women of the families of the early owners or cultivators of the soil, to whom they afforded protection, whence may have arisen the law of inheritance known as 'Aliya Santana,' under which property vests in the females of a family and descends from mother to daughter, though from the fact that titles descend to males, who also now ordinarily exercise management, it is usually described as a system under which property descends from maternal uncle to nephew or sister's son. The persistence of the custom, whatever may have been its origin, is no doubt due to the fact that it tends to prevent division of landed property, and enormous vested interests have arisen, which it is exceedingly difficult to touch. The Brahmins seem to have acquired great influence in Tuluva, as well as in Malabar, soon after their arrival; but the chiefs continued to adhere to Jainism, and throughout Tuluva a check seems to have been administered to Brahminical influence by a revulsion of feeling after the conversion to Vaishnavism of Vishnuvardhana, one of the Hoysal Ballál family which had overthrown the Chálukyas and succeeded to the suzerainty of Tuluva. When the Ballál family began to give way to the Yádavas of Dévagiri, the local Jain chiefs, the Bairasu Wodears, became independent, and established a rule which seems to have been so adverse to Brahminism, that in the Brahmin chronicles the prince who ruled at Barkúr about 1250 A.D. is confounded with the legendary Bhútaráya Pandiya of the Malayalam Kéralólpatti and other popular traditions. By 1336 A.D. the Bairasu Wodears had been forced to acknowledge the suzerainty of Vijayanagar, Barkúr was vacated, and became the seat of a governor of the northern part of the province nominated from Vijayanagar, another being stationed at Mangalore. The rest of the country was governed by means of feudatory Jain chiefs and Brahmin Ballâls and Hegades, the most important of the Jain chiefs being the old Humcha family, now best known as the Bairasu Wodears of Karakal, Choutar of Mudbidri, Bangar of Nandávar, Ajalar of Aldangadi, Múlar of Bailangadi and Sávantar of Moolky. Amongst

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the Brahmins the most important was probably the Chitpádi Ballál of Udipi. Under the strong rule of Vijayanagar the country seems to have been in a very prosperous state, but the coast began to suffer owing to the struggle between the Portuguese and the Moors for maritime commercial supremacy, and by 1526 all the chiefs along the west coast had to pay a small tribute to the Portuguese. After the destruction of Vijayanagar by the Muhammadans in 1565, several local chiefs joined a Muhammadan league against the Portuguese, under which Basrúr in the north was to have gone to Bijapúr, and Mangalore to the Zamorin of Calicut. This aroused the indignation of the Lingáyat Ikkeri king, who had for some time ruled Tuluva as a feudatory of Vijayanagar, and early in the seventeenth century he overthrew the representatives of the Bairasu Wodear family then in power at Barkúr, and completely put an end to all Jain influence in the northern part of the province. He then attacked the Jain chiefs farther south, but was unable to do more than partially reduce their powers, after which he recognised them as feudatories, and dealt similarly with the Hindu chiefs of Kumbla and Niléshwar. During all these struggles the prosperity of the country fell off considerably, and the sufferings of the people culminated in the Mysore conquest by Hyder and Tippu in the eighteenth century, when the power of the local chiefs was finally broken, and in addition to devastation by fire and sword, and fiscal exactions, whole tracts of country, especially in the neighbourhood of the ghauts, were driven out of cultivation owing to the closure of the coast markets to pepper and betel-nut. Peace was restored by the British annexation in 1799 A.D.

Early allusions.

Amongst the names mentioned by early classical writers none are now identified as belonging to Tuluva. For some time it was supposed that the *Muziris* of Pliny the elder was probably Mangalore, and the *Nelkunda* of the Periplus, Niléshwar, but the view taken by Dr. Burnell and Bishop Caldwell that *Muziris* must be identified with an ancient town called Muyiri near Cranganore is now generally accepted as correct. Similarly *Nelkunda* is now understood to be Kallada near Quilon. This identification of *Muziris* with Cranganore renders untenable a suggestion frequently made that the *Barace* of Pliny and the Periplus which was near *Muziris* is Barcelore or Basrúr in the Coondapoor taluk. Similarly a suggestion that Kalianpúr in the Udipi taluk is identical with the *Kulliana* of the Periplus is seen to be impossible, as *Kalliana* was well north of the pirate coast, which is known to have extended as far as the Konkans. Kalianpúr, however, may be the *Kalliana* mentioned by Cosmos Indico Pleustes early in the sixth century as the seat of a Christian bishop. Of course there

Early allusions.

are to be found Brahmin chronicles, which profess to give an account of the district from the date of its creation, and, although these are known to be of late date, and their chronology is obviously imaginary, it may be well to mention them as probably containing some germ of valuable local tradition.

The largest part of the present district of South Canara was the ancient Tuluva; but the northern portion, together with the southern portion of the coast of North Canara, belonged to Haiga. Five '*máganés*' of the Southern taluk formed part of Malabar until a comparatively recent period. The present historical notice will deal only with Tuluva and Haiga, except after the period when the southern *máganés* were incorporated with Canara.

Brahmin chronicles and local traditions.

According to the 'Grámapaditti' of the Tulu Brahmins, Tuluva and Haiga were created by Parasu Ráma by reclaiming from the sea as much land as he could cover by throwing his axe from the top of the Western Ghauts, and to secure Brahmins for the reclaimed tract he took a number of fisherman's nets, tore them up, and made Brahminical threads with which he invested the fishermen and turned them into Brahmins, after which he retired to meditate, informing the newly created Brahmins that if they were in distress and called upon him he would come to their aid. After some time, during which they lived happily, they called upon Parasu Ráma merely to test his veracity, and on his arrival he was so disgusted at being called to no purpose, that he cursed them and reduced them to Sudras again. After the lapse of years Brahmins were again brought to Tuluva from Ahi-Kshétra in the north by Mayúra Varma of the Kadamba dynasty. According to the Brahmin chronology Mayúra Varma reigned from 455 to 445 B.C.,[1] but it is now known that his probable date was about 750 A.D.[2]

According to another tradition mentioned by Buchanan[3] the reclaimed country was given by Parasu Ráma to certain Brahmins called Náyar and Matchy, who were not true Brahmins, and was afterwards taken from them by fishermen and pariahs, who kept possession of it till Mayúra Varma brought in Brahmins from Ahi-Kshétra.

In both these traditions there is a clear recognition of the important fact that Brahminical influence in Tuluva dates only from the introduction of Brahmins by the Kadamba king Mayúra Varma. Prior to this, Jainism had no doubt obtained a footing, as in king Asoka's inscription at Girnar it is stated that in Chola, Pándiya and Kéralaputra, as far as Támbraparni, the system of

[1] Buchanan, iii. 96. In another account given by Buchanan the date is 1470 B.C.

[2] Fleet's *Kanarese Dynasties*, 86.

[3] Buchanan, iii. 163.

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caring for the sick, both of men and cattle, followed by king Dévanampriya Priyadási had everywhere been carried into practice.

Kadamba dynasty.

From copper plate grants[4] found at Halsi in Belgaum, and also at Banavási in North Canara, it appears that the early Kadambas of Banavási, a city which was mentioned by Ptolemy about 150 A.D., dispossessed the Pallavas, well known as lords of Kanchi or Conjeeveram, but who seem, in early days, to have had a capital at Vátápi or Bádámi in the Bombay Presidency, and in the opinion of Mr. Fleet, one of the latest approved authorities in these matters, their power culminated about the close of the fifth century, when they were overthrown by the early Chálukyas.

According to a tradition mentioned in Wilson's *Mackenzie Collections*,[5] after Parasu Ráma had caused the sea to recede from the Western Ghauts, Siva and Párvati came to the ghauts to see the land which had been reclaimed, and while there a son was born to them under the shade of a Kadamba tree. It is not generally supposed to have been definitely ascertained whether the Kadambas were of local or northern origin, but local traditions tell of numerous Kadamba chiefs ruling in Tuluva both before and after the advent of the Brahmins.

About 700 A.D. a colony of Jews settled at Cochin and obtained a grant from the king, or Perumal, of the ancient kingdom of Chéra or Kérala.[6] The king was named Bháskara Ravi Varma, the suffix Varma, which is still used by Malayalam princes, apparently indicating some connection with the early Kadambas and Pallavas. To that deed no Brahmins are witnesses, but by 774 A.D. they were powerful enough to be required to attest the grant then made to the early Christians. The date of the separation of Tuluva from Kérala is not known. According to the Kéralólpatti—the Brahminical traditionary history of Malabar—the first separate king of Tuluva, Tulubhan Perumál, was brought in by the Brahmins, and gave his name to the country, fixing his residence at Kótéshwaram. The boundary of the two provinces—the present Chandragiri river, formerly called the Perumpula—probably represented the limit up to which some feudatory overlord succeeded in exercising effective control on behalf of the Chálukyas, probably the chiefs of Humcha in the Nagar district of Mysore.[7] It is not likely that Kótéshwaram, which is merely a place of Brahminical importance, was ever the capital of Tuluva.

Mayúra Varma and his Brahmin allies.

The Mayúra Varma, who introduced Brahmins into South Canara, belonged to a collateral branch of the Kadamba family, which, about the middle of the eighth century, overcame the early

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[4] Fleet's *Kanarese Dynasties*, 8, 9, 15.
[5] Wilson's *Mackenzie Collections*, p. 60.
[6] Logan's *Malabar*, p. 267.
[7] Rice's *Mysore*, iii. pp. 96, 97.

Chálukyas, who had succeeded the early Kadambas at Banavási about 560 A.D., and had held Tuluva as overlords of the Jain chiefs of Humcha, a town in the Nagar district of Mysore.

Mayúra Varma and his Brahmin allies.

Regarding the introduction of the Brahmins two accounts are given in Buchanan.[8]

One represents the Kadamba rule in Tuluva as interrupted by Hubashica, a Koraga chief, who was eventually driven out by Mayúra Varma's son, Lókáditya of Gókarnam, who brought in a colony of Brahmins from Ahi-Kshétra. The other describes the country as being in the possession of Mogérs or fishermen and Holeyas, the raja being of the latter tribe, until it was invaded by Mayúra Varma who brought a colony of Brahmins with him from Ahi-Kshétra. He and the Brahmins were again driven out by Nanda, son of Utanga, one of the Holeyas who recovered the ancestral dominions. His son Chandra Sayana had learned respect for the Brahmins from his mother, who had been a dancing girl in a temple, and he accordingly brought the Brahmins back again and eventually made over all his authority to them and made all the Holeyas slaves to the sacred order.

It seems to be probable that up to the time of Mayúra Varma or about the middle of the eighth century A.D., the authority of the Kadamba chiefs in Tuluva was more or less successfully disputed by adherents of the earlier dynasties, and about the time of Mayúra Varma their subjugation seems to have been finally accomplished by his son or relation, Lókáditya of Gókarnam, aided by Brahmins whose political influence was gradually extending. The Brahmins are said to have come from Ahi-Kshétra on the banks of the Godávari. The ordinary Ahi-Kshétra of Brahmin tradition has now been identified with Ramnuggur in Rohilkund. It is not apparent why a Jain Kadamba king ruling at Banavási in North Canara should have brought Brahmins into South Canara from either Rohilkund or the banks of the Godávari, and it is probable that the Ahi-Kshétra of Tulu Brahmin tradition is merely the Sanskrit form of Haviga or Haiga (the land of the snakes) in which Gókarnam is situated, that is to say, Lókáditya brought the Brahmins from his capital Gókarnam, which is situated at the northern extremity of the ancient province of Haiga. In support of this view it may be mentioned that in the local history of the Honalli Math in Sunda above the ghauts in North Canara Gókarnam is described as being in a place called Ahi-Kshétra.[9] It might be objected that in the traditions of the modern Havig or Haiga Brahmins, as well as those of the Tulu Brahmins, Ahi-Kshétra is given as the name of the place

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[8] Buchanan, pp. 96, 98, 110. [9] *North Kanara Gazetteer*, ii. pp. 83 and 346.

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Mayúra Varma and his Brahmin allies.

from which Brahmins were brought to Canara and that Haiga Brahmins could not describe themselves as having been brought from Haiga. The modern Havika or Haiga Brahmins, however, are only a branch of the Tulu Brahmins separated from most of the others by religious differences of a comparatively late date, and to this day their family records are written in the character which was used for all old Tulu and Malayalam writings. The details of the tradition of the introduction of Brahmins by Mayúra Varma, which is found in many forms amongst the different branches of the Tulu Brahmins, refer generally to a distribution of Brahmins south of Gókarnam, and there is another tradition which speaks of the Havig Brahmins having come from Valabhipúr.[10] This probably refers to the arrival of Brahmins at Gókarnam prior to their distribution throughout Tuluva, and it is suggested in the *North Kanara Gazetteer* that this movement of Brahmins from the north may have been consequent on the destruction of Valabhi in Kattiawar by Arabs about the seventh or eighth century A.D. In connection with this suggestion it is to be noted that in the Mayúra Varma Charitra[11] it is stated that Mayúra Varma was born at Valabhipúr and brought Brahmins from the north to the western coast and Banavási, whence they were distributed by his son throughout Haiga and Tuluva, and especially at Gókarnam. They seem to have been followers of Bhattácharya, and this may have given rise to the tradition that they came from the banks of the Godávari.

The position held by the Brahmins after their introduction by Mayúra Varma is not clear. In Rice's *Mysore Gazetteer*[12] it is stated that Brahmin governors were appointed at Barkúr, Mangalore, Kadaba and Kásaragód, but local traditions point rather to the assignment of groups of villages which were held by them under the title of Hegade or Ballál. Representatives of Brahmin Hegades or Ballál s remain to this day, and, though they no longer are in the position of petty chiefs or poligárs, they are still in possession of at least a portion of those lands which they held as private property or on behalf of temples. There is no satisfactory evidence that any of these holdings date from so early a period as the time of Mayúra Varma, but they seem to have existed in some form or other when the Vijayanagar dynasty came into power. The influence of the Brahmins during the first four or five centuries after their arrival seems to have been very great, as a large majority of the non-Brahmin Hindus of South Canara still class themselves as Saivites, although

[10] *North Kanara Gazetteer*, i. p. 117, note.
[11] *Mackenzie Collection.*
[12] i. p. 194.

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the bulk of the Tulu Brahmins adopted the Vaishnavism of Madhaváchárya, who was born in the district in the twelfth century A.D. The Tulu-Brahmin Grámapaditti quoted by Buchanan and the Ráyapaditti given him by Rámappa Karnika, Shanbogue of Barkúr,[13] though differing widely in chronology, both describe Balhica or Banhica Abheri and Mona families as ruling after the Kadamba successors of Lókáditya and before the advent of the Hoysal Ballâls about the eleventh century, but these seem to be nothing more than names adopted from the Puránas.[14]

Humcha chiefs.

The mention in the 'Grámapaditti' of 81 cousins of Lókáditya as governing Tuluva during twenty-four years seems to point to petty Kadamba chiefs ruling locally as feudatories under an overlord, and the Brahmin traditions are not necessarily irreconcilable with the story given in Rice's *History of Mysore*[15] that Jénáditta and his descendants, Jain Kadamba chiefs of Humcha near Shimoga, moved their capital first to Sisila at the foot of a pass in the Uppinangadi taluk and afterwards to Karakal near the ghauts in the Udipi taluk, where, under the name of Bairasu Wodears, they continued in power under the Chálukyan, Hoysala and Vijayanagar kings. The same account of the origin of the Bairasu Wodears of Karakal was given to Buchanan[16] by the Karakal Jains; but from an inscription in a temple at that place he came to the conclusion that the first of the Bairasu Wodears, who was said to be a fugitive from Northern India, came himself from Humcha and Sisila to Karakal in the beginning of the fourteenth century. This is clearly much too late a date, as inscriptions of the Bairasu Wodears, which have been found in Kalasa to the north of the Kudre Mukh in Mysore, date from the twelfth to the sixteenth century.

Ráshtrakútas and Chálukyas.

That the Kadamba kings of Banavási, to whom Mayúra Varma belonged, held power in North Canara up to the fourteenth century is proved by grants at Banavási, Savanúr and Gókarnam,[17] but their enjoyment of dominion was by no means uninterrupted, and for some time, at any rate, they ruled only as underlords of the Ráshtrakútas, and afterwards of the Western Chálukyas. This underlordship, however, did not always extend as far as Tuluva. The mention of the subjugation of Tulu kings in inscriptions relating to the Kadamba king Kámadéva about 1189 A.D., and the Hoysal Ballál king Vishnuvardhana about 1137 A.D.[18] points to a local chief, probably one of the Bairasu Wodears, who no doubt governed sometimes independently and sometimes

[13] Buchanan, iii. pp. 96 and 110.
[14] *Introduction to the Mackenzie Collections.*
[15] Pp. 353, 374.
[16] Buchanan, iii. p. 92.
[17] Buchanan, iii. p. 12.
[18] Fleet's *Kanara Dynasties*, pp. 66–86.

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as feudatories of the more powerful Chálukyan, Kálachúri or Ballál dynasties.

Hoysal Balláls.

The Hoysal Ballâls first held power at Dvárasamudra, the modern Halebid in Mysore, and in 1039 A.D., Vinayáditya, the first powerful member of the family, was a governor or a 'Mahá Mandaléshwar' under the Chálukyan king Vikramaditya VI.[19] The third in succession from him, Vishnuvardhana, entered on a career of conquest in all directions between 1117 and 1137 A.D., and, amongst other places, is said to have taken Banavási. He did not hold it long however, and it is doubtful if his power ever extended as far as North Canara, but all local tradition speaks to the rule of the Ballál family in Tuluva, the local capital being at Barkúr. One of their strongholds on the ghauts overlooking the Bangádi valley is still known by the name of Ballálraya Drug, and the Narasingha Ráya mentioned by Buchanan as having founded a city called Narasinghangadi near Jamálabád in the same valley soon after the extinction of the family of Mayúra Varma may have been Vishnuvardhana's son and successor Narasingha.[20]

Bairasu Wodears, Bhútal Pandiya.

The Hoysal Ballâls, like the Kadamba chiefs, were Jains by religion; but Vishnuvardhana was converted to Hinduism and became the patron of the Vaishnava reformer Rámánujachári. Some traditions speak to his having commenced a vigorous persecution of the Jains, while others say that he in no way molested them; but his conversion seems to have greatly weakened the position of the family in Tuluva, where Jain chiefs remained in power for many centuries later. The Hoysal Ballâls were in constant warfare with the Yádavas of Dévagiri, who were aided by the Banavási Kadambas, who had acknowledged their suzerainty, and Kámadéva, who ruled at Banavási about 1184, is said to have reconquered Tuluva; but in 1192 Hoysal Víra Ballál succeeded in again taking Banavási. The struggle between the Yádavas and the Ballâls seems to have continued with varying success until both were overthrown by the Muhammadan conqueror Malik Kafur early in the fourteenth century. During all this protracted fighting the chiefs in Canara were probably practically independent, according, at the utmost, a mere nominal allegiance to the family from time to time paramount above the ghauts, and by 1250 A.D., Barkúr, the alleged coast capital of the Hoysal Ballâls, is said to have been in the hands of a local ruler called Bhútal Pandiya, who, in the story told to Buchanan, is said to have been brought by the Bhútagalu, or devils, from Pándava, and to have introduced the

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[19] Buchanan, iii. pp. 96, 110, 118.

[20] Buchanan, iii. p. 68.

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HISTORY AND ARCHÆOLOGY

Bairasu Wodears, Bhútal Pandiya.

Aliya Santána rule of inheritance from mother to daughter or from uncle to sister's son. He has also been described as a prince of the Pandiyan family of Madura, who took advantage of a civil war to invade Tuluva. Local tradition certainly ascribes the introduction of the Aliyana Santána system to one Bhútal Pandiya, but it also assigns him a much earlier date,[21] and the Bhútal Pandiya of tradition is probably a mythical personage, representing the struggle of Brahminism against the supporters of the early demon worship of the country. The inscriptions at Kalasa above the ghauts in the Canara boundary above referred to show that the Bairasu Wodears were in power at this time. The inscription on the colossal statue at Karakal shows that Víra Pandiya was the name of the member of that family[21] ruling in 1431 and it is probable that the name Pandiya alone gave rise to the idea that the prince who ruled at Barkúr about 1250 belonged to the Madura Pandiyans, whose power had begun to decay in the preceding century. All the Jains of Tuluva, except those of the priestly class, follow the Aliya Santána rule of inheritance, and extend toleration, to say the least of it, to the prevailing Bhúta or devil worship practised to this day by their fellow countrymen. The mention in the Brahminical 'Ráyapaditti' of a civil war, and the details relating to the army of devils or *bhútagalu*, point to a struggle in which local chiefs supported by the Bant landholders, who, whether Jains or not, are regular worshippers of *bhútas* or spirits, successfully defended the ancient worship and customs against the Brahmins, who had no doubt been elated by the conversion of the Ballál king Vishnuvardhana. Local causes were also at work which would tend to the Brahmins asserting themselves more than usual, as the great Vaishnavite teacher, Mádhavácharí, who established the famous temple of Krishna at Udipi, was born at Kalianpúr near Udipi, about 1199 and his teaching was warmly adopted by the Shivalli Brahmins who had previously been adherents of the Smártha philosophy of Sankarácharya, which, it is to be observed, accorded a higher place to the favorite local deities than was assigned to them by Mádhavácharya. That the chiefs, who were in power at Barkúr from 1250 to 1336, belonged to the family of the Bairasu Wodears there

[21] They were connected with a family of Pandiyans, who, as feudatories of the Chálukyas, ruled at Nonambavádi in the Chittledrug district of Mysore from the middle of the eleventh to the end of the twelfth century, and in this connection it may be noted that inscriptions in Tulu have been found in the same district. Jaggadevi of Pattipombachchapura or Humcha as well as Vijaya Pándiya of Nonambavádi are mentioned in inscriptions of the twelfth century, and from others it appears that Jaggadéva of Humcha was overcome by the Hoysal kings Ballál I and Vishnuvardhana. The Tulu and Pándiya kings coupled together as overcome by Vishnuvardhana were probably the Humcha and Nonambavádi families.

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Bairasu Wodears, Bhútal Pandiya.

can be no doubt, as that family was then too strong and has left too many marks of its supremacy about that time for it to be likely that an invading rival could have come into power for three quarters of a century and mysteriously disappeared without leaving any traces of a struggle with the Bairasu Wodears, whose authority extended from Karakal at least as far as Coompta in North Canara. In all these chronicles the Brahmins either ignore the local Jains or casually allude to them as petty local chiefs, which would account for one whose supremacy throughout Tuluva could not be denied, being described as an invading member of a well known royal family of widely extended dominion. That the Brahmins were hostile to Bhútal Pandiya is apparent, not only from the story about his being brought in by an army of devils and the nickname Bhúta, but also from the fact that the submission of the family to the Vijayanagar dynasty is said to have been brought about by the influence of the head of the Sringéri Math founded by Sankaráchárya.

Bhútal Pandiya gets the credit of having been the first ruler of Tuluva who levied the assessment in rice, or its equivalent in money, instead of in paddy, thus throwing the cost of husking on the landholders, and practically increasing the assessment by about ten per cent. This probably means no more than that the actual date of the change is not known.

From *Ferishta's History* it appears that a Ráni of Barcelore[22] or Basrúr near Coondapoor paid her respects to Shankra Naik, one of the last representatives of the Yádavas of Dévagiri, who ruled from 1310 to 1312, when he was put to death by Malik Kafur. This is the only historical indication of the exercise of either Yádava or Ballál supremacy in any part of South Canara after the time of Bhútal Pandiya, and the local chiefs probably retained independence till the Vijayanagar dynasty made their power felt below, as well as above, the ghauts, and Déva Ráya, the third in succession from Bhútal Pandiya, is said to have made over, in 1336, the kingdom of Barkúr to Harihara Ráya, the founder of the city of Vijayanagar, and of the most powerful dynasty in Southern India within historic times.

Harihara Ráya of Vijayanagar.

Vijayanagar on the south bank of the Tungabudra and Anegundi on the north, about 36 miles from Bellary, are now well known for their ruins, and early histories and books of travel describe them as cities of fabulous size and wealth. The origin of the two brothers who founded them—Harihara and Víra Bukka, commonly known as Hakka and Bakka—is variously told; but it is probable that they came from Warrangal in the dominions of the

[22] Briggs' *Ferishta*, p. 140.

Harihara Ráya of Vijayanagar.

Nizam of Hyderabad after it had been taken by the Muhammadans in 1323. They are said to have been aided by the head of the Sringéri Math, which is situated on the Western Ghauts just above the Udipi taluk. This Math always possessed great influence amongst the Brahmins of South Canara, and the early extension of Vijayanagar power to the coast is proved by the evidence of Ibn Batuta, the African traveller, who went from Sadásivagar to Calicut in 1342, and mentions that the Muhammadan Governor of Honore was subject to an infidel king Harihara of Vijayanagar. Harihara promptly made arrangements by which, while not interfering with the exercise of power by the local chiefs, he secured for his authority something more than the nominal recognition, which alone had for some time been accorded to the paramount power. According to the history given by Shanbóg Rámappa Karnika to Buchanan, [23] he recognised the Jain Rájas as feudatories on the condition of their keeping up a certain number of troops to be at his disposal when necessary. The collection of the revenue remained in their hands, as well as all general administrative and executive powers, and they were allowed to enjoy certain portions of their territories free of tax. Similar, but less extensive, powers were granted to the Brahmin Hegades and Ballâls in enjoyment of the villages said to have been assigned to them by Mayúra Varma, and all the revenue collected by them and the Jain Rájas were paid to an officer called 'Ráyaru' located at Barkúr and another stationed at Mangalore with the title of Wodear. A minor officer was also put in charge of the district of Bangadi.

Two inscriptions mentioned by Buchanan [24] tell of a Ráyaru at Barkúr appointed by kings of Vijayanagar, and in the grant by which the underlordship of Tuluva was made over to the founder of the Ikkeri family, Mangalore and Barkúr are described as separate provinces. The old fort at Barkúr is said to have been built by Harihara Ráya, but at Mangalore, the feudatory Jain chief, styled the Bangar, seems to be better known to history than the Vijayanagar Wodear to whom the chiefs are said to have paid over the revenue.

The land revenue of the country was revised and systematized by Harihara Ráya on the basis of one-half of the produce to the cultivator, one-fourth to the landlord, one-twelfth to the Brahmins and gods, and one-sixth to the Government. The land was not measured, but a rough estimate of the produce was made according to the amount said to be required as seed, and the Government share of the produce was commuted to a money assessment for

[23] Buchanan, iii. p. 122.

[24] Buchanan, iii. pp. 109 and 171.

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which the local chiefs were responsible. Under the rules adopted for the commutation the Government share amounted to one pagoda for 2½ 'kuttis' of land, while formerly that had been the amount paid for three kuttis.[25]

Ibn Batuta.

As stated above the African traveller Ibn Batuta visited [26] the coast of Canara in 1342, or six years after the date ordinarily assigned for Harihara Ráya's revision of the assessment. He went by land from Karwar to Calicut, and mentions a number of the places which he passed through along the coast. As is usual with Muhammadan travellers, he so changes the names of places that it is difficult to recognise them. Out of the names of those which seem from their position in his narrative to be in South Canara, it can only be conjectured that Fakanur is Bakanúr or Barkúr and Manjaruns, Mangalore. Of Manjarun he says that there are three merchants of Persia and Yemen, and the king of the place is the greatest of the kings of Malabar. The number of Muhammadan merchants he puts down at four thousand. He makes no allusion to the trade with China which Marco Polo, in speaking of Malabar about 1290, describes as being ten times more important than that with the Red Sea. He describes the coast road as well shaded with trees, and states that at every half mile there was a rest-house, a well, and a Hindu in charge. The obvious exaggeration here is in accordance with the style of all early Muhammadan records of travel, and indicates that we must not too literally accept the following statement: that in all the country there was not a space free from cultivation, and everybody had a garden with a house in the middle, and round it a fence of wood. People travelled as beasts of burden, and the king only on a horse, traders were carried on men's backs, and nobles on a box on men's shoulders, merchants were followed by two or three hundred carriers, and thieves were unknown, because death was the punishment of theft. After making all due allowance for exaggeration, it seems clear that Ibn Batuta found the country in a fairly prosperous state, but there was no wheeled carriage, and only nobles were allowed to use a palanquin, while horses were reserved for princes.

It was during the reign of Déva Ráya, the fourth of the Vijayanagar kings, that the Bairasu Wodears of Karakal completed and set up at that place the wonderful colossal statue of Gumta Ráya, [27] on which there is an inscription, dated 1431 A.D. (S. 1353), stating that it was erected by Rája Víra Pandiya to Bahubalin, son of Vrishaba, the first Tírthankara of Giant race.

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[25] Wilks' *South of India*, p. 95. [26] Lee's *Ibn Batuta*, p. 169.

[27] A description of the statue is given under "Archæology."

Abd-er-Razzak.

In 1448 Abd-er-Razzak, an ambassador from Persia, landed at Mangalore on his way to the court of Vijayanagar;[28] and states in his account of his travels that at a distance of about 12 miles from Mangalore he saw a temple which had not its like on earth. It was a perfect square of about 10 yards by 10, and 5 in height, made of molten brass with four platforms or ascents, and on the highest of them an idol of the figure and stature of a man, made all of gold with eyes composed of two red rubies. Passing on from that place he arrived each day at a town or village well populated, until a mountain rose before him. After this description of a temple in South Canara, it is not surprising to learn that he found Vijayanagar, a city of surpassing magnificence.

Portuguese settlements.

During the reign of Déva Ráya's two successors, the power of Vijayanagar greatly declined, and about 1490 A.D. the old family was set aside, and the kingly power assumed by one Narasinga Ráya, whose origin is doubtful, but who raised the kingdom to more than its former magnificence, and led to the whole of Southern India being described by early Portuguese writers as the kingdom of Narasinga. An inscription found by Buchanan in a temple at Baindúr shows that in 1506 one Kedali Basavappa Arasu Wodear had been appointed by Narasinga Ráya to the Ráyada of Barkúr. It was in the time of Narasinga Ráya that the Portuguese first made settlements on the west coast, and in 1498 Vasco dá Gama landed on one of the islands of the coast of Udipi and set up a cross calling the island 'El padron de Sancta Maria,'[29] which seems to be the origin of the name St. Mary Isles by which the islands are now known. He made no landing on the coast of South Canara. In 1505 an ambassador from the Vijayanagar court gave the Portuguese permission to build a fort anywhere in his dominions, except at Bhatcal, which he had ceded to another. So far as South Canara is concerned the permission was not taken advantage of for many years. In 1514 the Portuguese traveller Duarte Barbosa visited the coast of Canara,[30] and described 'Tulinát' as beginning north of Honore and containing many rivers and sea-ports in which there was much trade and shipping bound for all parts. He noticed each port briefly as he passed along the coast. At Baindúr much rice of a good quality is said to be gathered and sent to Bhatcal. At Barsola or Basrúr, belonging to the kingdom of Narasinga, many ships came from Malabar and others put in from Ormuz, Aden, and Xeher. Mangalore is said to be a very large town peopled by Moors and Gentiles, at which was shipped to Malabar for the

[28] Elliott and Dawson, p. 10. [29] Kerr's *Voyages Castanheda*, p. 385.
[30] Stanley's *Barbosa*, pp. 78 to 84.

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common people a brown rice, better and more healthy than the white. A little specially good pepper was also shipped. He seems to have been struck with the appearance of the town, which he describes as follows: "The banks of the river are very pretty and "very full of woods, palm trees, and are very thickly inhabited by "Moors and Gentiles and studded with fine buildings and houses "of prayer of the Gentiles which are very large and enriched with "large revenues. There are also many mosques, where they greatly "honour Mahomed." At Kumbla he found a lord ruling and governing it for the kingdom of Narasinga. Much brown and very bad rice was here harvested and given to the people of the Maldive Islands in exchange for thread for making cordage for ships.

We have thus the testimony of this traveller to show that the Vijayanagar dynasty had by 1514 established their supremacy in the extreme south of Tuluva. Though the Kumbla Rája's territory lay to the north of the Chandragiri or ancient Perumpula river, the traditionary boundary line between Tuluva and Malabar, and the limit which no Náyar woman can cross to this day, the Rájas followed Malayalam customs, and Jain influence does not seem to have prevailed to so great an extent as in most other parts of Tuluva. In 1508 Krishna Ráya ascended the throne of Vijayanagar, and at no time was that dynasty more powerful than during his reign, which lasted till 1542. He maintained friendly relations with the Portuguese, who helped him in his wars with the Muhammadan rulers of Bijapúr. The Portuguese laid themselves out to destroy the Arab and Moplah trade along the coast, and, as Vasco da Gama heard, while running down the coast in 1524, that the Muhammadan merchants of Calicut had agents at Mangalore and Basrúr, he ordered the rivers to be blockaded.[31] In 1526 under the viceroyship of Lopes Vas de Sampayo, Mangalore was taken possession of after a slight resistance offered by the Muhammadan merchants,[32] and in the same year Franciscan friars began preaching in Mangalore and the neighbourhood, in pursuance of the Portuguese policy of securing facilities for the spread of Christianity in all treaties which they made with native princes. The Portuguese gradually made themselves masters of the whole of the trade of the coast to the exclusion of the Arabs and Moplahs, and then proceeded to levy a kind of tribute of grain from all the coast ports. The port of Barcelore had to pay annually five hundred loads of rice, the king of Barkúr one thousand, the king of Carnád near Mulki eight hundred, the king

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[31] *Three Voyages of Da Gama*, p. 399.

[32] *Commentaries of Albuquerque*, Introduction, p. 92.

of Mangalore two thousand four hundred loads of rice and one thousand of oil, Manjéshwar seven hundred loads of rice, and Kumbla eight hundred.[33]

Portuguese settlements.

Krishna Ráya of Vijayanagar having died in 1542, he was succeeded by Sadásiva Ráya, but the affairs of the kingdom were practically managed by his minister Ráma Rája, who eventually usurped the supreme power. He found the Portuguese assistance so valuable that in 1547 he executed a treaty with them, under which the whole export and import trade of the country was placed in the hands of the Portuguese factors. The local chiefs, however, did not quietly acquiesce in these arrangements. Default in payment of the grain tribute, followed by reprisals by fire and sword, occurred from time to time, and shortly after the defeat and death of Ráma Rája and the capture and sack of Vijayanagar in 1565 by a confederation of Muhammadan powers, a league against the Portuguese, to which several of the local Canara chiefs gave their adhesion, was entered into by Ahmednagar, Bijapúr and Calicut. Under this league Barkalúr or Basrúr was to go to Bijapúr; and Mangalore to the Zamorin of Calicut, and after the capture of Ádóni by Bijapúr, the Queen of Gairsappa is said to have recognised the suzerainty of Bijapúr for the country between Goa and Barkalúr. Less progress was made by the Zamorin, a combined attack on Cheol by the fleets of Ahmednagar and Calicut having been entirely unsuccessful. As the Calicut admiral was on his way back from Cheol, the Queen of Ullal on the southern bank of the Mangalore river asked him to assist her in surprising the Portuguese port at Mangalore. He acceded to the request and landed a number of men secretly, but the attempt ended in failure.[34]

With the defeat and death of Ráma Rája the connection of Canara with Vijayanagar came to an end, and, as is usual in such cases, the local chiefs began to act as if they were independent. The Bairasu Wodear family of Karakal is said to have ceased to reign at that place about the middle of the sixteenth century on the death of a Rája who left seven daughters. The last inscription of the family at Karakal is that on the colossal statue above referred to, dated 1431 A.D., and tradition speaks of the hills in the neighbourhood having been granted by a Bairasu Wodear to a Chitpávan Brahmin for the formation of areca-nut plantations about the middle of the sixteenth century. The dominions of the family are said to have been divided between the seven daughters of the last Rája, each of whom was known by the name of Baira Dévi. One of these reigned at Bhatcal on the boundary between

[33] *Subsidios para da Historia da India Portugueza*, pp. 246, 247.

[34] Kerr's *Voyages Faria-y-Singa*, vi. p. 439.

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North and South Canara, and was probably the queen of that place who made a treaty with the Portuguese in 1554. Another married Itchappa Wodear, the Jain chief of Gairsappa, and had a daughter, who is said to have re-united in her person the whole of the ancestral dominions, all her aunts having died without issue.[35] There is no trace of her ever having exercised power in the southern parts of South Canara, and when she joined the Muhammadan league against the Portuguese between 1570 and 1580, her territories do not seem to have extended farther south than Barkalúr or Basrúr. The current tradition in the Mangalore and Kásaragód taluks represents a Karakal branch of the family as reigning until it was extirpated by Sivappa Naik.

Ikkeri or Bednore dynasty

In the latter years of the Vijayanagar power there had arisen, on the borders of Canara above the ghauts, a family who gradually acquired supreme power throughout the province. A Gauda of Mallavar caste, a Sivabaktar or Lingáyat by religion, the headman of the village of Keladi, rose in the service of Krishna Ráya of Vijayanagar, and about 1560 A.D., one of the family, who by this time had moved their residence to Ikkeri, obtained from Sadásiva Ráya a grant of the government of Barkúr and Mangalore as underlord, with the title of Sadásiva Naik.

It is probable that the natural desire of the local Jain chiefs to secure their independence on the decadence of the Vijayanagar power, was increased by their repugnance to be placed in subordination to a Lingáyat, and the relation between the Jain chiefs and the Ikkeri family seems to have been hostile from the beginning. Venkatappa Naik, who was ruling at Ikkeri when the Queen of Gairsappa and Bhatcal acknowledged the overlordship of Adil Shah of Bijapúr, was too strong a man to allow the territory assigned to his family by Vijayanagar to slip away from him in this manner, and by 1608 he had completely defeated and slain Baira Dévi, and almost extirpated the Jains throughout the province of Barkúr. By 1618 he had so far consolidated his power there, that he was in a position to add fifty per cent. to the land assessment, which, under the Vijayanagar family, had been fixed at a much lower rate in Canara than elsewhere, owing to the difficulty of dealing with so distant a dependency.

In the province of Mangalore, although Venkatappa Naik made his power felt, and at least temporarily reduced several of the most powerful of the Jain chiefs, including the Bangar, whose capital appears then to have been at Mangalore, he did not feel himself strong enough to deal with it as he had done with Barkúr, and the fifty per cent. addition to the assessment was only partially introduced there.

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[35] Buchanan, iii. pp. 132, 166.

Della Valle.

Some light is thrown on the relations between the Ikkeri family and the Jain chiefs of Mangalore, and on the condition of the country generally at this time by the letters of an Italian traveller named Della Valle, who visited the west coast of India about 1623, and accompanied an embassy which went from Goa to Ikkeri *viâ* Honore and Gairsappa. He went merely in his private capacity as a traveller, but he mentions in his letter that the object of the embassy was to secure the restoration of the chief of Banghel (Bangar) near Mangalore, an ally of the Portuguese, who had been defeated by the Ikkeri Rája Venkatappa Naik and had fled to Casselgode (Kásaragód), where there was another small but free prince. Venkatappa Naik agreed to allow the Bangar Rája 7,000 pagodas annually if he came to reside in Venkatappa's dominions or somewhere under the eye of the Portuguese, but he declined to do anything more or to make him an allowance so long as he remained at Kásaragód. The Portuguese ambassador knew that the Bangar Rája would not accept these terms; but, as Portugal was then at war with Persia and Acheen, it was resolved that further complications should be avoided for the present, and the embassy withdrew. A courier was sent to Bangar Rája, and Della Valle went with him, being desirous of seeing Barcelore (Basrúr), Mangalore, and above all the Queen of Olaya (Ullal), on whose behalf the Bangar Rája had been attacked by Venkatappa Naik. At Dharmapuram he allowed the rest of the party to go on and followed at his leisure, accompanied apparently only by his horsekeeper and a man to carry his baggage. He did this fearlessly, he says, as the highways in Venkatappa Naik's dominions were very secure. He came by the Kollúr ghaut and was able to ride part of the way down. He passed the night at Halkal, and remarked that the people there lived for the most part by sowing rice, and stated that they paid a very large tribute to the king, and were in great poverty. He crossed the river at Gulvádi and came by a short cut to Higher Barcelore (Basrúr), which belonged to Venkatappa Naik, while Lower Barcelore belonged to the Portuguese. After visiting the town, in which he found "a fair, long, broad, and strait street, "having abundance of palmettos and gardens and ample evidence "of good quarries and a considerable population," he moved on to the Portuguese settlement at Lower Barcelore (Coondapoor), whence he came by sea to Mangalore, landing on the way at the St. Mary Isles to take young wild pigeons from the nests, of which there was great abundance on the islands. The Portuguese seem then to have held the portion of Mangalore immediately north of the Ullal river, and the church Del Rosario was inside the fort. About a musket shot north of the fort was a small river crossed

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Della Valle.

by a ruinous stone bridge, and which might also be forded. On the other side of this were the territories of the Banghel (Bangar) Rája, whose palace had been destroyed by Venkatappa Naik, but the bazaar and market place remained, though not so stored with goods as in former times. Della Valle visited Ullal and sailed up the Gurpur river, and gives an account of the quarrel between the Queen of Ullal and her divorced husband, the Bangar Rája, which ended in the queen calling in the aid of Venkatappa Naik and obtaining a decisive victory over the Rája and his ally, the Portuguese Governor of Mangalore. He also tells of other petty chiefs in the neighbourhood who were subdued by Venkatappa Naik at the same time. These were evidently merely large Jain or Bant landholders. For instance he met the "Queen of Manel," out walking to inspect a new channel which she had had dug, and thought she looked more like a "dirty kitchen wench" than a queen. However, she showed her quality by her speech. Della Valle sailed for Calicut on the 19th December 1623.

During the early years of Venkatappa's power he does not seem to have been on good terms with the Portuguese, and the mission in the neighbourhood of Mangalore appears to have been temporarily abandoned at the beginning of the seventeenth century, probably when the Portuguese ally, the Bangar, had to fly to Kásaragód. In 1631,[36] however, the Portuguese concluded a treaty with Bednore under which they were allowed to establish a fort at Basrúr, and though the Bednore Rája objected to European priests, he seems to have made no objection to the deputation of native priests by the Archbishop of Goa to take charge of the Christians in Canara, whose number were swelled during the seventeenth century by immigrants from the neighbourhood of Goa, who left their own country on account of famine and the devastation caused by the Mahrattas under Siváji. Siváji's operations do not seem to have extended as far as South Canara with the exception of a raid by sea on Basrúr.

Petty Jain chiefs.

In 1646 the Ikkeri family moved their capital from Ikkeri twenty miles further south to Bednore at the top of the Hossangadi ghaut, leading into the Coondapoor taluk, and Sivappa Naik succeeded to the throne in 1649. He reigned for twenty-two years, but as he had been minister and administrator from 1625 during the reigns of his cousins, two Bhadrappa Naiks, his rule practically lasted for forty-six years, during all which time he was engaged in strengthening himself throughout the southern parts of South Canara, where his name is known as the builder of a series of

[36] *North Kanara Gazetteer*, p. 124.

strong forts on the coast of Kásaragód taluk, the most important being Chandragiri and Békal. The Karakal family disappeared, and, as already noted, the Bangar was in difficulties, but on the whole the old families seem to have been strong enough throughout the Bednore rule to insist on their recognition as underlords. The most important of the Jain chiefs seem to have been the Bangar whose family now resides at Nandáwar, the Choutar of Mudbidri, the Ajalar of Aldangadi, the Múlar of Bailangadi and the Vittal Hegade.

Petty Jain chiefs.

Hegades and Ballâls.

In the Udipi taluk there were the old Brahmin Hegades and Ballâls, the best known being the Chitpádi Ballâl who had a fort near Udipi. In the south the Kumbla Rája, a Hindu following Malayalam customs, continued to govern as he had done under Vijayanagar. The two forts above mentioned, Békal and Chandragiri, are really in the Malayalam country, and the district in which they are situated seems to have been subject to the Kollatiri or Chirakkal Rájas until the time of Sivappa Naik's invasion, after which it formed part of Canara. The territory of the Rája of Niléshwar was not annexed until 1737, during the reign of Sómaśékara Naik, when the fort at Hosdrug was built and the Rája was compelled to submit after a struggle of twelve years, in which both the English and French took part. He also obtained aid from Coorg and made over to the Coorg Rája a number of villages now known as the Amara Mágané to supply Dodda Virappa with milk (Amara). The Rája at the same time purchased the Sulia Mágane with money taken from the Tale Kávéri temple to secure cocoanuts for the goddess. Particulars of the part taken by the French and English will be given farther on. Though the Bednore family objected to the introduction of European priests, they seem to have maintained friendly relations with the Portuguese throughout the seventeenth century, and entered into a number of treaties with them, the most important so far as South Canara is concerned being that of 1670, by which the Portuguese were allowed to establish a factory at Mangalore. In 1678, a further treaty enabled them to build churches and set up a factory at Kalianpúr in the Udipi taluk.

Fryer's travels.

About 1673 the English traveller Fryer visited the coast of Canara, and was struck with the number of Christian converts, while those who had not been converted were marvellously conversant with the devil, alluding apparently to demon or Bhúta worship. He also noted that the people of Canara had good laws and obeyed them, and travelled without guides along broad roads, not along bye-paths as in Malabar.

Arab and Portuguese conflicts.

In order to completely put down the trade with the west coast the Portuguese were in the habit of seizing every vessel

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Arab and Portuguese conflicts.

which left a Canarese port without a Portuguese pass. The Arabs retaliated in every way they could and succeeded in burning Mangalore in 1695. The seizure of a Bednore vessel in 1713 led to a dispute with the Rája and a squadron was sent from Goa, which captured a fort at Basrúr and at Kalianpúr and destroyed many ships and much merchandise. This brought the Bednore Rája to terms, and in 1764 he executed a treaty in which he promised not to allow Arab ships to visit the two ports. He agreed that the Portuguese should establish a factory at Mangalore, and allowed them to build churches where there were Christians and engaged that his officers should not molest Christian Missionaries.

English at Mangalore, 1737.

Captain Hamilton, who visited Canara in 1718, mentions that the Dutch had by that time established a factory at Barcelore (Basrur) and that the Portuguese used to send rice from that place to Muscat and bring back horses, dates and pearls. The advance of the Bednore Rája Sómaśékara Naik's general into Niléshwar in the first instance and afterwards across the Káveri river brought the Bednore power into conflict with the interests of the East India Company's factory at Tellicherry, and in 1736 the Malayális, assisted by the English, recovered the Álikunnu port at the mouth of the Kavoy river and three others to the south of it, after which Mr. Lynch, one of the English factors, went to Mangalore, and, in February 1737, executed a treaty with Surapaya, the Canarese Governor of Mangalore, under which the English obtained certain commercial advantages including a monopoly of all the pepper and cardamoms in the portions of the Kollatiri dominions, conquered by the Bednoreans, and the Bednoreans agreed not to advance to the south of the Vallárpatnam river. The English then vacated the Álikunnu fort at the mouth of the Kavoy river and the Bednoreans at once occupied it, thus securing complete command of the Niléshwar portion of the Kollatiri territories.[37] The Niléshwar fort, however, remained in the hands of the Rája of Niléshwar, the head of an offshoot of a branch of the Kollatiri or Chirakkal family, which had intermarried with the family of the Zamorin of Calicut. In 1750 Mr. Dowill succeeded to the charge of the Tellicherry factory, and under his administration the influence of the English factory with the Kollatiri family gave way to that of the French factory at Mahé. Mr. Dowill suggested to the Bednore Governor of Mangalore that he should seize the fort at Niléshwar, but the French forestalled him, and hoisted their flag both at Niléshwar and at Álikunnu at the mouth of the Kavoy river as allies of the Niléshwar Rája. A detachment was sent from Tellicherry to Hosdroog to aid the Bednore troops, but the

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[37] Logan's *Malabar*, i. pp. 363, 371.

English at Mangalore, 1737.

weather was unpropitious, and the commanding officer returned to Tellicherry without effecting a junction with the Bednoreans.[38] In 1752 the English made peace with the Kollatiri princes, and in 1753 Mr. Dowill was superseded by Mr. Hodges, who, while avoiding war, set himself to oust the French from Niléshwar by helping the third prince of the Niléshwar family in opposition to the first. The policy was successful, and by the time war next broke out between the French and the English, the country powers had been so completely withdrawn from the French alliance, that the latter were able to make but a poor stand at Mahé in 1761, and, as a consequence, all their minor posts were soon after recovered. In 1755 Áli Rája of Cannanore, in alliance with the Mahratta pirates of Angria, organised an expedition to ravage the Canara coast, and, amongst other places, they plundered Manjéshwar and landed an expedition further north, which is said to have marched eighteen leagues inland and secured a booty of 4,000,000 pagodas from the Kollúr temple.[39]

Under the Vijayanagar rule the assessment demanded by the paramount power was light, and though we know little of the relations between the local chiefs and the people, the accounts of travellers, the improvements effected in the agriculture of the country, and the temples and buildings left behind by the Jain rulers, all point to a high state of prosperity. Under the Bednore rule decline set in. The first Bednore ruler considerably raised the assessment wherever he could, but as this was mainly in the tracts in which he completely subverted the local rulers, it is doubtful whether the burdens imposed on the agriculturists were really greater than before, so long as there was a strong goverument like that of Venkatappa Naik, under which the traveller Della Valle was able to move about securely in the Coondapoor taluk with only one attendant, without any fear of thieves. The ruin of the old Jain cities, such as Karakal, Mudbidri and Barkúr was, however, an unquestionable loss to the country, and the continued fighting with the Jain chiefs in the Mangalore and Kásaragód taluks must have caused much suffering. In the later years of the Bednore rule there were a number of additional imposts and exactions, and the favourites and dependents of the Bednore Rájas, when placed in charge of districts, were often allowed to indulge in acts of oppression and extortion.[40]

Hyder Ali.

Notwithstanding this, there can be no doubt that South Canara was in a decidedly prosperous state when Bednore was captured

[38] *North Kanara Gazetteer*, p. 137. [39] Logan's *Malabar*, i. pp. 392–402.
[40] Sir Thomas Munro to the Board of Revenue, dated 31st May 1800.

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Hyder Ali.

in December 1760 by Hyder Ali of Mysore, who at once sent a detachment to take possession of Mangalore, which place he regarded as of great importance as a naval station. He established dockyards and an arsenal there, and also promptly commenced through the civil officers of the former government, an administration which, both under Hyder Ali and his son Tippu, seems to have had but one aim, namely, to see how much it was possible to extort from the agriculturists without diminishing cultivation. The experiment was carried too far, much land fell out of cultivation and the bulk of the remainder lost its saleable value. The embargo placed by Tippu on the exportation by sea of areca-nut and pepper also produced a most disastrous effect on the areca-nut plantations near the ghauts on which much labour and capital had been expended.

War between the English and Hyder Ali broke out in 1766, and in February 1768 Mangalore was taken by an English expedition from Bombay. Tippu, who was then in command of the troops in Canara, marched inland, until the arrival of Hyder, who appeared in person before Mangalore in May, on which the garrison embarked and sailed away abandoning their sick and their stores. Hyder then moved above the ghauts by the Subramanya pass. At this time Hyder ceded to the Raja of Coorg the Panja and Bellari Máganés of the Uppinangadi taluk, partly for aid received in money, and partly in exchange for territory above the ghauts; but about 1775 he resumed them both, together with the Amara and Sullia Máganés, which had been given to Coorg by Sómaśékara of Bednore about forty years before.

Capture of Bednore.

The second Mysore war began in 1790. In 1791 Sir Edward Hughes destroyed Hyder's infant navy at Mangalore, and early in January 1793, the month following the death of Hyder Ali, General Mathews landed at Coondapoor with a force from Bombay which achieved a remarkable and unexpected success, considering the smallness and unpreparedness of the force and the large numbers opposed to it. His landing was unsuccessfully opposed by 500 horse and 2,500 infantry, and, notwithstanding difficulties about provisions and transport, he reached the foot of the Hossangadi pass twenty-five miles off, in three days. Hossangadi, in the middle of thick forest at the foot of the pass, was defended by trees felled across the road, for about three miles in front the enemy lined the brushwood in the flanks and there was a breast work about 400 yards from the fort. The 42nd Highlanders under Colonel Macleod carried the positions at the point of the bayonet, and next morning the fort was found abandoned with fifteen guns. The first barrier on the pass mounting eleven guns was also abandoned, but the second had to be carried with the bayonet. From that

point there was almost a continuous line of batteries and breast works and at the top there was the fort of Hyderghur, the whole being defended by about 17,000 men. The different positions were all carried with the loss of 50 killed and wounded.[41] General Mathews then advanced and entered Bednore on the 27th January, the gates having been thrown open by the Governor who had been a favourite of the late Hyder Ali, but had learnt that Tippu had determined to degrade him. The English General was, however, forced to capitulate on the 30th April 1793 on the arrival of Tippu with a large army.

Capture of Bednore.

Siege of Mangalore.

Before the surrender of Bednore, Tippu had dispatched a force to appear before Mangalore, and state that Bednore had fallen, but it was attacked and defeated twelve miles from Mangalore. On receiving news of this reverse, Tippu moved with his whole army against Mangalore, which was held by Colonel Campbell with a force of about 700 Europeans and 2,000 sepoys. After a preliminary engagement at an outpost on the 23rd May, in which four officers and ten Europeans and two hundred sepoys were lost, Colonel Campbell withdrew all outposts and made arrangements to stand a regular siege. Tippu soon perceived that either surrender or speedy capture by assault was not to be thought of, and sent off his cavalry as the monsoon was approaching, but they were overtaken by a storm and not half the horses reached the eastern cantonments. Three regular assaults were made, which ended in failure, though the fort was not only breached, but almost reduced to ruins in parts. Attempts to penetrate these became of almost daily occurrence, but the assailants were invariably repulsed, and on the 2nd August, after the siege had lasted for more than two months, Tippu agreed to an armistice, French aid having been withdrawn from him owing to the conclusion in Europe of peace between England and France. During this armistice General Macleod arrived with re-inforcements and took up his residence at Mangalore; but, notwithstanding clear proof of the systematic evasion by Tippu of the provision in the armistice regarding the victualling of the fort, he did not feel justified in effectually relieving Mangalore and sailed away again with his forces on the 2nd December. On the 23rd January 1794 the hospitals were filled with two-thirds of the garrison and the deaths were from twelve to fifteen a day. A large proportion of the sepoys were blind and the remainder so exhausted as frequently to fall down on parade. In these circumstances Colonel Campbell considered it useless to hold out any longer, and capitulated on the 30th January 1794 on condition of being allowed to go with the

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[41] Wilks' *South India*, ii. p. 54.

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survivors of his garrison to Tellicherry, where he died on the 23rd March following.

Deportation of Christians.

During this war Tippu suspected the Native Christian population of secretly aiding the English and a terrible persecution ensued. Having set guards over the villages in which they resided he seized in one night 60,000 according to his own statement, 30,000 according to another estimate, and forcibly deported them to Mysore. Their sufferings on the way were intense, and only a portion reached Seringapatam, where the men were circumcised and a number of the most able-bodied selected for service as soldiers. The remainder with the women and children were distributed throughout the villages of Mysore. All the lands of the Canara Christians were confiscated and the churches destroyed. The few who escaped deportation fled to Malabar and Coorg and remained there till after the taking of Seringapatam in 1799, when they returned, as did also the survivors of those deported to Mysore. The number of those which returned has been computed at about 12,000, which, in little more than three-quarters of a century, increased to 50,000, and they now form one of the most prosperous sections of the community.*

Except in the extreme south Tippu completed the suppression of the old local chiefs which had been begun under the Bednore rule, and dispossessed them of all but their private lands. The Kumbla Rája was driven from the country, and when he returned soon afterwards and endeavoured to excite disturbances, he was taken and hanged. His younger brother was also hanged for joining the English at the first siege of Mangalore, and a nephew was similarly executed in 1794. His successor was received as a pensioner at Tellicherry where the Vittal Hegade had fled some time before. Two of the Rájas of Niléshwar were hanged in 1787 by the Commandant of Békal, but their successor came to terms and was in possession when Canara was annexed by the British Government.

As soon as the last Mysore war broke out in 1799 the Kumbla Rája and the Vittal Hegade both returned to Canara, but the former at any rate acted more like a leader of banditti than anything else, and the Rája of Coorg took the opportunity of raiding in the direction of Jamálabád and Bantval, and into the territories of the Rája of Kumbla, who was an old enemy of the Coorgs. The country suffered very severely at this time, especially from the depredations of the Coorgs, but this was so little understood at the time, that on the downfall of Tippu, the English, in order to reward the Coorgs for the services rendered by that State above the ghauts during the several wars against Mysore, made over to

* They now number over 70,000.

them the Amara, Sullia, Panja and Bellari districts which had been before ceded to them by the Bednore and Mysore Rájas, and resumed by Hyder in 1775.

Annexation of Canara by the British, 1799.

The last of the Bangar Rájas was hanged by the commandant of Jamálabád during the siege of Seringapatam. After the fall of Seringapatam, Captain (afterwards Sir Thomas) Munro was appointed Collector of Canara in June 1799, and from the 1st February 1800, he was placed under the control of the Madras Board of Revenue, though on political matters he continued to correspond with General Close, the Resident of Mysore. With the exception of an irruption of the followers of Dondia from Bednore into the taluk of Coondapoor, he seems to have found all quiet in the northern part of the district of South Canara, where the collapse of Tippu's power was complete, and the local chiefs had long before been deprived of all authority; but the fortress of Jamálabád in the Uppinangadi taluk held out on behalf of Tippu's family, the Vittal Hegade was plundering in the northern part of the present Kásaragód taluk, the Kumbla Rája in the same taluk, who had returned to his old district on the commencement of the war with Tippu, was offering a kind of passive resistance, and the Niléshwar Rája in the south was employing somewhat similar tactics. Jamálabád is a high rock near Beltangadi in the Uppinangadi taluk, the summit of which is accessible only by a narrow neck of land connecting it with a spur from the Kudre Mukh. Struck with the facilities which it afforded for the construction of an impregnable stronghold, Tippu Sultan, on his way back from Mangalore to Mysore, determined to build a fortress on the top of it, and on its completion he garrisoned it with a party of 400 men, and made the town at its foot the residence of an Asoph in charge of the southern part of Canara. The town was destroyed by the Coorgs during the Mysore war, and after its close the fort was captured by a party of British troops in October 1799,[42] but again fell into the hands of adherents of the Mysore family. One Timma or Kistna Naik,[43] who had been a

[42] The following letter from Mangalore, dated 9th October 1799, appeared in the *Madras Courier* of the 30th October. . . . Jamalabad is about 20 miles to the east of Mangalore. The lower forts were stormed yesterday and with such good fortune that only one casualty occurred, one man being wounded, but in attempting the upper works 33 men of the Light Company of the 15th Regiment were killed or wounded . . . . The communication to these works is on the side of a bare rock about 1,700 feet high and nearly perpendicular. I have this moment received the agreeable intelligence of the surrender of the fort, and we are now in the entire possession of the Canara country; our loss from the commencement of the siege to the completion of it consists of 2 officers wounded, and about 65 killed and wounded . . . . . .

[43] Munro calls him Kiṣnam Naigue in official correspondence, but Buchanan, a year later, found that he was generally known as Timma Naik.

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Annexation of Canara by the British, 1799.

petty officer in Tippu's fort at Békal, was taken into the Company's service on his undertaking to procure recruits for the Bombay Army, but he persuaded two hundred of them to go off with him and join Subba Rao, a former Sheristadar of Coimbatore, who had set up a pretender at Bailangadi under the name of Fatty Hyder, a natural son of Tippu Sultan. After joining Subba Rao he set out to try and surprise Jamálabád, and succeeded in doing so, as a young officer, who had just arrived to relieve the garrison, was sleeping for the night at the foot of the rock with all his men except a Naik's party.

The Vittal Hegade was the representative of an old family of hereditary renters under the Bednore Government which was at first expelled by Hyder, but restored when a number of the family pretended to become Mussulmans. They were again dispossessed, however, in 1768 for assisting the English, and the Hegade went to reside at Tellicherry as a pensioner of the East India Company. Under pretence of assisting the English he made incursions into Canara during all the subsequent wars, and continued plundering the country after the fall of Tippu and the English occupation. On being called to account for the plunder of the Manjeshwar temple, after he had been informed that all hostilities with Mysore had ceased, the Hegade fled from Tellicherry on the 15th December 1799, and joined his nephew at Vittal with a party of about 150 armed followers which he proceeded to strengthen with as many recruits as he could raise. Captain Munro considered that one of his objects was to induce the Government to make over to him the management of Vittal, and as his success in such an attempt would at once have led to the revival of a number of similar long extinguished claims in every part of Canara, he considered it necessary to call on Colonel Hart, the Officer Commanding the Province, to proceed against him without delay as a rebel, stating at the same time that as the inhabitants of the district were mainly peaceful Brahmins and Bants who had no attachment for the Hegade, a small force would be sufficient to deal with him. On the 7th May Subba Rao, who had by this time allied himself with the Vittal Hegade, attacked the temple at Uppinangadi, in which the Tahsildar of Kadaba was holding his office. The Tahsildar escaped by crossing the river in the dark, and several Potails, who were there at the time, also got away with their collections which they afterwards duly brought in. Subba Rao then marched on Bantval, which he plundered and afterwards took up his quarters at Puttúr and began to collect the revenue. By this time Captain Munro had raised a body of two hundred armed peons and placed them under the orders of Kumára Hegade of Dharmastala, one of the Potails of Bantval, who rendered good service on a former occasion at Jamálabád. Kumára Hegade marched against Subba Rao and

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defeated him on the 11th, but was himself shot through the arm. The Tahsildar of Kadaba then took charge of the peons and pursued the rebels towards the Sisila ghaut, where he dispersed them on the 17th with the loss of forty or fifty men. The regular troops being fully employed in ordinary garrison work, and in the blockade of Jamálabád, Captain Munro raised his force of peons to seven hundred and reported on the 18th June that he had not the smallest apprehension that the Tahsildars would not, with the help of the peons, be able to establish themselves again in their respective districts. In the beginning of July the Tahsildar defeated the Vittal Hegade at Vittal, and made prisoners of nine members of his family including his nephew. With this event and the fall of Jamálabád, after a blockade of three months, all disturbances came to an end and the country settled down quietly. The Kumbla and Niléshwar Rájas had submitted and accepted pensions on realising that so far from gaining anything by holding out they ran considerable risk of losing everything. Though they had kept up armed bands of followers and had dissuaded the landholders from appearing before Captain Munro to complete a settlement of land revenue in the hope of regaining under the English what they had lost under the Bednore and Mysore Governments, they offered no active resistance nor did they resort to plunder like the Vittal Hegade.

Throughout the district generally, the landowners, like the chiefs above mentioned, endeavoured to delay coming to a settlement in the not unnatural desire to secure, on a change of government, the best possible terms for themselves, but so far from showing any signs of actual hostility their conduct was such that Captain Munro was able to report,[44] during the disturbances in the southern taluks, that the Potails had behaved remarkably well, several, whose private property had been plundered, having brought in their collections, while he knew of only one or two instances in which advantage had been taken of the disturbances to keep back rents. He especially mentioned the Potail of Uppinangadi, who, though kept in confinement by Subba Rao for fifteen days, and treated with great severity, refused to reveal where his collections were kept and eventually brought them all in.

In submitting proposals for the reduction of certain items of revenue after more than a year's experience of the district, Captain Munro reported[45] that the Coondapoor and Udipi taluks were in a flourishing condition, except the neighbourhood of Karakal which had suffered by lying in the track of invading armies. Kadaba, in the present Uppinangadi taluk, was the most desolate district

[44] Letter dated 1st July 1800. [45] Letter dated 9th November 1800.

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Annexation of Canara by the British, 1799.

in Canara, owing almost entirely to the irruptions of the Coorgs. The neighbourhood of Jamálabád excepted, the rest of the Uppinangadi taluk, the Mangalore taluk and the northern portion of the present Kásaragód taluk were thriving districts. The southern portion of the Kásaragód taluk, especially the part of it which was formerly under the Rájas of Kumbla, suffered much from the devastations of the Coorgs.

Buchanan's journeys.

In 1801 Dr. Buchanan was deputed by the Marquis of Wellesley, the Governor-General of India, to investigate and report "on the state of agriculture, arts, and commerce, the religion, "manners and customs; the history, natural and civil and anti-"quities" in Mysore and countries acquired from Tippu Sultan. He was a most observant and painstaking officer, and the 130 pages of his account of his journey, which relate to South Canara, contain an immense amount of information on all the subjects mentioned.

Entering the district from the south he was struck on the way from the Malabar frontier to Hosdrug with the neglected appearance of the country owing to the want of inhabitants which his Náyar informant attributed to depopulation by war, and by a famine that ensued while they were forced to retire into the woods to avoid circumcision. As he passed further north towards the Chandragiri river, he found the country bearing the same signs of neglect, though there were traces of former cultivation, but remarked that, with the present paucity of inhabitants, it would be madness to cultivate any but the richest spots. In the neighbourhood of Kumbla he found the rice lands more neatly cultivated than farther south, and saw many traces of former gardens. At Manjéshwar he found numbers of Konkanies in flourishing circumstances, and after visiting Mangalore he expressed an opinion that to judge from appearances the occupiers of land in Tuluva were richer than even those of Malabar. He was compelled to judge by appearances only, as the cultivators whom he had assembled to give him information, and most of whom he states were as fat as pigs, gravely told him that they were reduced to live on conjee or rice soup. The cultivation he found carried on partly by slaves, but mainly by hired servants. These latter, however, were usually so deeply in debt to their masters that they differed little from the slaves, except that they got larger allowances, and their masters were not obliged to provide for them in sickness or old age. Their wages he considered sufficiently high to enable them to keep a family in the greatest abundance. On the road from Mangalore to Feringapett he noticed that the sides of the hills had been formed into terraces with less industry than in Malabar, and the natives informed him

Buchanan's journeys.

that the pepper vines had been destroyed by Tippu to remove every inducement for Europeans to visit the country. At Bantval he noticed new houses building, the people were busily engaged in the bustle of commerce, and from their appearance were in good circumstances. On the way to Beltangadi he alludes to the devastations of the Coorgs and notices that hills formerly cleared had again become covered with trees. From Beltangadi he went to Mudbidri, the neighbourhood of which he considered one of the poorest countries he had ever seen. Thence he moved on to Karakal, near which he noted many traces of enclosures and heard that many villages had been deserted since the time of Hyder. From Karakal he went to Udipi through Hiriadaka, where he learnt that about a fourth part of what was formerly cultivated was waste for want of people and stock. From Udipi he went northwards through Bramhawar and Coondapoor to North Canara. Near the Suvarna and other rivers he noticed fine cocoanut plantations, and remarked that north of Bramhawar the country looked well, as even the greater part of a high sandy ridge was enclosed and planted for timber and fuel. Between Coondapoor and Kirmanjéshwar he found the plantations poor owing to the want of inhabitants, many of whom had been carried off by an epidemic of fever followed by an incursion of a predatory band of Mahrattas.

Intrigues of Native officials.

For some years after 1820 low prices led to difficulties being experienced in certain cases in collecting the land revenue, and in 1831 there were a number of riotous assemblages or 'kúts,' in which the ryots met together and declined to pay their kists. On an enquiry being held, it was found that the trouble was not really due to the heaviness of the land assessment, but to the intrigues of the Head Sheristadar and other Brahmin officials with the view of discrediting the Collector's administration, and bringing about the dismissal of the Naib Sheristadar and other Native Christians employed in the Collector's office. Quiet was restored without any difficulty, special measures being adopted to meet hard cases, and a rise in prices soon led to a general improvement in the prosperity of the district.

Coorg war.

In 1834, during the Coorg war, Colonel Jackson advanced on the 29th March from Kumbla with a small force and fell in with the Coorg picquet about 9 miles inland. On the 1st April they reached Íshwara Mangala, where Colonel Jackson learned that there was a strong stockade between Maddúr and Bellari, and on the third a reconnoitring party was attacked and lost two officers and more than 60 men killed and wounded. His force being obviously unequal to the task entrusted to it, Colonel Jackson quitted Coorg territory and fell back on Kásaragód.

CHAP. II. HISTORY AND ARCHÆOLOGY.

Coorg war.

At the close of the Coorg war, the districts which had been ceded to Coorg in 1799 were retransferred to South Canara, and in 1837 some malcontents succeeded in raising a disturbance and made a successful attack at Puttúr on the Collector and two companies of sepoys who had advanced from Mangalore to meet them. The Collector and his troops were compelled to return to the coast, harassed on their flank by increasing bands of raiders, one of which succeeded in reaching Mangalore and opening the jail and burning the kutcherry. The troops at Mangalore, however, had no real difficulty in holding their own. The raiders were soon dispersed and the disturbance died away.

In 1862 the administration of the portion of the district of Canara to the north of the Coondapoor taluk was transferred to the Presidency of Bombay, mainly on commercial considerations connected with the development of the cotton trade.

ARCHÆOLOGY.

Archæology.

The archæology of South Canara has not yet been properly worked out and the known architectural remains are not of any great antiquity. No discoveries have been made of any ancient cave or rock-cell sepulchres, similar to those which have been found in Malabar, and the early religious edifices of the Dravidian inhabitants of the country, were probably built in wood, as is done to some extent to this day throughout the western coast, as well as in Burmah and other places where somewhat similar climatic conditions lead to abundance of wood being available. In Canara, as elsewhere, the teaching of the Brahmin immigrants, who came in about the middle of the eighth century, did nothing to stimulate architecture, and though there are many Brahmin temples which probably existed in some form or other from a period soon after the arrival of the earliest representatives of the Tulu Brahmins, there are none of any architectural importance, nor have any inscriptions been deciphered which show at what date any portion of any of those now standing was erected.[46]

Snake stones.

Snake stones or stones with the figure of serpents sculptured on them abound all over the district placed in groves, or set up by the roadside, or on raised platforms at the foot of the sacred peepul tree (*Ficus religiosa*), and although many of them are probably of great antiquity, there is nothing whatever to indicate from what period they may be held to date. Tree and serpent worship does not seem to form an essential part of the ancient

[46] The temple at Baidur mentioned in the *Mackenzie Collection* is of comparatively modern date in its present form at any rate. It bears inscriptions of the sixteenth century.

Dravidian demon and ancestor worship, which still prevails in the district, and, as there is ample evidence of its incorporation into both Jainism and Vaishnavism, it is by no means certain that any of the stones preceded the Jains and Brahmins.

Stone temples.

As the Rájas of the Kadamba dynasties which ruled at Banavási in North Canara and elsewhere in the early centuries of the Christian era were Jains at one time, it is probable that Jainism in South Canara preceded Vedic Brahminism, but no traces of early Jainism are now left, and building in stone seems to have begun only after a dynasty of Jain chiefs who first ruled Tuluva, as underlords of the Chálukyas, at Humcha above the ghauts, moved their capital down into Tuluva eventually to establish it at Karakal. Fergusson, the best known authority in Indian Architecture, declares that the Jain temples in Tuluva are neither in the ordinary Dravidian nor Chálukyan style, nor in that of Northern India, and thus there can be no doubt that much of the work is a reproduction in stone of the forms in use in Tuluva in wood from a very early period. Why the Dravidians of the west coast should have a style of their own resembling nothing nearer than Nepaul and Thibet and whence it came are questions which have yet to be settled. In this connection, however, it may be worth noting that the demon worship, which prevails amongst all the lower castes throughout Southern India and especially in the west coast, is probably identical with the Shamanism of High Asia, the old religion of the Tatar race.

The exact date of the migration of the Humcha chiefs from Humcha to Kalasa near the Kudre Mukh on the eastern border of the Mangalore and Uppinangadi taluks, and afterwards into Tuluva is not known, but their grants have been found at Kalasa bearing dates in the twelfth century, and they seem to have come down the Sisila ghaut and moved northwards again, taking the name of Bairasu Wodears, and eventually fixing their capital at Karakal, where a large temple was built by them in 1334 A.D. The conversion of the Ballál king Vishnuvardhana to Vaishnavism in the beginning of the twelfth century probably led to some of the Jain master-builders transferring their services to the powerful Jain chief of Tuluva, thus introducing into South Canara the practice of stone-building acquired in a country where stone is abundant and wood comparatively scarce. Besides the Bairasu Wodears there were a number of minor Jain chiefs, the most important being the Choutar of Mudbidri, the Bangar, the Ajalar, and the Múlar. All seem to have adopted the practice of building in stone without, however, changing the style of architecture.

The Jain remains of interest are of three classes, *bettus* or walled enclosures with a colossal statue, *bastis* or temples, and *stambhas* or pillars.

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HISTORY AND ARCHÆOLOGY.

Bettus, colossal statues.

The most singular of all are the *bettus*, of which only three are known to exist in the world—two in Canara, at Karakal and Yénúr and one at Srávana Belgóla in Mysore. The statue in all three represents 'Gumta Ráj,' with regard to whom Fergusson remarks [47] that he is not known to the Jains in the north, and no one seems to know who he was or why he is worshipped. The largest of the Canara statues is that at Karakal, which is 41 feet 5 inches in height, and is estimated to weigh about 80 tons. That at Yénúr is smaller, being only 35 feet in height. From an inscription on the Karakal statue, it appears to have been completed in 1431–32 A.D. and from the greater prominence given at Yénúr to serpents on steles alongside the legs of the statue, Mr. Fergusson is of opinion that it is older than the one at Karakal. The ground given for this opinion, however, is clearly insufficient, as at Srávana Belgóla the serpents are even less prominent than at Karakal, which would make this statue the most modern of the three, while in fact it is much older than that at Karakal. Local tradition assigns it to the time of the ancestors of the Ballál kings [48] who were first known historically in 1047 A.D. However this may be, the statue was certainly built before the conversion of the Ballál king Vishnuvardhana in the beginning of the twelfth century, after which the political power of the Jains in South India was transferred from Mysore to South Canara, and building in stone introduced into that district.

Besides being of a colossal size, the Karakal statue is rendered more striking by its situation on the top of a huge granite rock on the margin of a most picturesque little lake.

The following description of it is given in Mr. Walhouse's article in *Fraser's Magazine* [49] already referred to: "Upon the "out-skirts of the town rises a rocky hill of generally rounded "form like a basin reversed approaching 300 feet in height, its "base rough and bushy, the upper slopes smooth and steep. "Looking up the hill from a distance the enchanted castles of "fairy tales come back to mind, for on the top is seen a castle-"like wall pierced with a wide-arched entrance, and a dark "gigantic form towering over it waist high. This is one of those "colossal statues that are found in this part of the country, statues "truly Egyptian in size, and unrivalled throughout India as "detached works. On the hill-top a crenelated quadrangular wall "encloses a stone platform 5 feet high, on which rises the "stupendous image 45 feet in height. Nude, cut from a single "mass of granite, darkened by the monsoons of centuries, the vast "statue stands upright, with arms hanging straight, but not

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[47] *History of Indian Architecture*, p. 267. [48] Buchanan, p. 411.
[49] *Fraser's Magazine*, May 1875.

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HISTORY AND ARCHÆOLOGY.

Bettus, colossal statues.

" awkwardly, down the sides, in a posture of somewhat stiff but " simple dignity. The form and lineaments are evidently the same " with those which, from Ceylon to China and utmost Tartary, " have handed down with unvarying tradition the habit as he lived " of that most wondrous of mortals that ever wore flesh, Gautama " Buddha . . . .

" Remarkable it is too that the features show nothing dis- " tinctively Hindu. The hair grows in close crisp curls ; the " broad fleshy cheeks might make the face seem heavy, were it not " for the marked and dignified expression conferred by the calm " forward gazing eyes and aquiline nose, somewhat pointed at tip. " The forehead is of average size, the lips very full and thick, the " upper one long almost to ugliness, throwing the chin, though " full and prominent, into the shade. The arms which touch the " body only at the hips are remarkably long, the large well- " formed hands and fingers reaching to the knees ; the exigencies " of the posture and material have caused the shoulders where the " arms join to be rather disproportionately broad and massive. " The feet, each 4 feet 9 inches long, rest on a stance, wrought " from the same rock, that seems small for the immense size " and weight (80 tons) of the statue, a lotus stem [50] springing at " each foot is carried up in low relief twice round each leg and arm. " A brief inscription at the side below tells that the image was " erected by king Vira Pandia in 1432 to Bahubalin, son of " Vishaba, the first Tirthankara of giant race, himself a giant, and " therefore so represented, but still in the shape of the founder of " that faith whence the Jain heresy diverged. A low cloister " runs round the inner side of the enclosing wall, and a massive " stone rail of three horizontal bars surrounds the platform. Once " in sixty years the scattered Jains gather from all quarters and " bathe the colossus with cocoanut milk."

Bastis.

Jain *bastis* or temples are to be found, some in use at the present day, others in various stages of ruin, all over the district, but especially in the Udipi and Mangalore taluks and the northern portion of the Uppinangadi taluk. In many cases most picturesque sites have been selected for them, and with regard to Mudbidri in which there are no less than eighteen temples, Mr. Walhouse writes : [51]

" No Cistercian brotherhood was wiser in choosing a dwelling " place than the Jains. Their villages are ever marked by natural

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[50] According to Fergusson, this is a twig of the Bo-tree of Sakyamuni, the *Ficus religiosa* or peepul, and he attributes its presence there together with the serpents on the steles to the incorporation of much of the old tree and serpent-worship in popular Buddhism and its offshoot Jainism.

[51] *Fraser's Magazine* for May 1875.

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Bastis.

"beauty and convenience. This one named Mudbidri is in a "slight hollow on the verge of a wide rolling plain, covered after "the rains with vast expanses of tall grass between flat lined "elevations which are often studded with beds of a light blue "gentian. The village is embowered in fruit and flower trees "and intersected by a labyrinth of hollow ways or lanes worn "deep by the rains and tread of generations. Rough steps "ascending to a covered entrance like a lych gate lead up to the "houses that stand back amongst the trees. The banks and walls "built of laterite blocks black with age are shrouded with creep-"ing plants, azure convolvuli, and a profusion of delicate ferns "sprouting from every crevice, and words are wanting to de-"scribe the exquisite varieties of grasses that wave everywhere "on walls and roofs. Bird-of-paradise plumes, filmiest gossamer, "wisps of delicate spun glass, hardly equal in fairy fineness the "pale green plumy tufts that spring in unregarded loveliness "after the monsoon. Shade and seclusion brood over the peaceful "neighbourhood, and in the midst stands the greatest of the Jain "temples built nearly five centuries ago. It is undesecrated, "very extensive and magnificent, containing, it is said, on and "about it a thousand pillars, and no two alike. In the prophy-"læum are several of great size, the lower halves square, the "upper round and lessening, recalling Egyptian forms, and all "covered with a wondrous wealth of sculptured gods, monsters, "leaf and flower work and astonishing arabesque interlacement, "cut with admirable cleanness. One quadrangular face bears a "hymn graven curiously in twenty-five small square compart-"ments, each containing four compound words, which may be "read as verses in all directions, up or down, along or across. On "the outer pediment there is a long procession of various animals, "living and mythical, among them the centaur and mermaid and "an excellent representation of a giraffe . . . .

"The temple is of three storeys with roofs rising over one "another in a curious Chinese fashion, the uppermost covered "with copper sheets, laid on like slates, a very beautiful pillar "stands in front inferior in height only to that at Karakal and "crowned with a capital and canopied entablature of delicate "open stonework ending in a highly enriched flame-like finial. "Sitting in the prophylæum amongst the wonderful columns, the "ponderous doors, themselves most elaborately carved, are pushed "back, and a dark interior disclosed. Entrance is forbidden, but "presently down in the gloom a light glimmers and small lamps "are lit, encircling a high arched recess, and revealing a polished "brass image, apparently 8 or 10 feet in height standing within. "This is Chandranáth, the eighth Tírthankara, bearing all the

"invariable Buddha form and lineaments. The tall brazen image "seen far down in the mysterious gloom wears a strange unearthly "appearance, and after gazing for some time the limbs and "features seem as though moving under the flickering play of "the light."

Bastis.

Two illustrations representing the exterior of this temple and a wood cut of a richly carved pillar inside it are given in Fergusson's *History of Indian Architecture*,[52] and he states that the architecture of the Jain temples in Tuluva is neither the Dravidian style of the south nor that of Northern India, and indeed is not known to exist anywhere else in India proper, but recurs with all its peculiarities in Nepaul. The reverse slopes of the eaves above the verandahs is the feature which specially resembles the styles common in Nepaul, and he considers it so peculiar that it is much more likely to have been copied than re-invented. He describes the exterior of the temples as much plainer than Hindu temples usually are, and he considers that the sloping roofs of the verandahs are so evidently wooden that the style itself cannot be far removed from a wooden original; in support of this view he mentions that in many places on the west coast below the ghauts the temples are still wholly constructed in wood without any admixture of stone, and almost all the features of the Mudbidri temples may be found in wood at the present day. With regard to the interiors of the temples he remarks that they are in marked contrast with the plainness of the exteriors, and nothing can exceed the richness and variety with which they are carved. No two pillars seem alike and many are ornamented to an extent that may seem almost fantastic, and this again is an indication of their recent descent from a wooden original as long habit of using stone would have sobered their forms.

In this connection, Mr. Logan, in his *Manual of the Malabar District*, states that the buildings of the kind in Malabar are invariably built of wood in all their characteristic portions, and points out that the style of architecture noted by Fergusson marks out better than anything else the limits of the ancient kingdom of Chéra; for the style prevails all through the west coast country from the limits of Canara to Cape Comorin, having been adopted even for Muhammadan mosques.[53] Building in stone in Canara seems to date from the time when Jain stone-cutters followed the Jain chiefs of Humcha down the ghauts from the Mysore plateau, where stone is much more easily procured than wood.

The Jain temple at Karakal, though inferior in size to that at Mudbidri, is not without interest. In plan and general appearance,

[52] Pp. 271–273.

[53] *Manual of the Malabar District*, pp. 185 (note) and 186.

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it differs considerably from most of the Jain temples in the district, and seems to bear a greater resemblance to the old Jain-temples found in other parts of India. It bears the earliest inscription which has been found, 1334 A.D., and may have been built before the builders introduced or trained by the Bairasu Wodears had conceived the idea of adopting the local wooden forms. Mr. Fergusson does not allude to it, but in Mr. Walhouse's article already quoted from, the following remarks on the Karakal temple come after his description of the statue: "On a broad "rocky platform below the hill on the side next the town stands a "remarkable Jain temple, much differing from the ordinary Hindu "style; square with a projecting columned portico facing each of "the four quarters. The columns, quadrangular for a third of "their height, pass into rounded sections separated by cable "bands, and have the sides and sections richly decorated with "deities, and most graceful and intricate arabesque designs, ro-"settes and stars, leaf and scroll work, in endless combination, "all made out of the carver's brain, wrought almost as finely as "Chinese ivory work. The friezes and pediments round the "porticoes and temples are ornamented in like manner, and fre-"quently a stone in the wall displays some quaint wonderfully "well-cut device; a hundred-petalled flower disc, two serpents "inextricably intertwined, or a grotesque head surrounded with "fruitage. The temple is roofed with immense overlapping flag-"stones, and bore some sort of cupola now ruined in the centre. "On the massive folding doors of one of the four portals being "rolled back, a strange sight is disclosed. In a large dark square "recess immediately facing the entrance stand three life-sized "images of burnished copper, the counterparts of the great statue "on the hill above, each resembling each, and looking weird and "unearthly in the gloom of the adytum as the light through the "opening doors falls upon them. A like triad stands within each "of the other three entrances."

As an instance of a different variety of the characteristic style of Tuluva Jain architecture, Fergusson gives an illustration of small five-pillared shrine beside a Jain temple at Guruvayankere[54] with three upper chambers and at the base a number of stones bearing images of serpents, and states that he knows no other instance of a shrine with five pillars or with access to the upper chambers. On the following page he pourtrays some of the tombs of priests at Mudbidri and remarks: "They vary much in size and "magnificence, some being from three to five or seven storeys in "height, but they are not, like the storeys of Dravidian temples,

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[54] Misspelt as "Gurusankerry" at p. 276 of Fergusson's *History of the Indian Architecture.*

"ornamented with simulated cells and finished with domical roofs. "The division of each storey is a sloping roof like those of the "pagodas at Katmandhu and in China or Thibet. In India they "are quite anomalous."

Stambhas.

The *stambhas* or pillars are certainly the most beautiful of the architectural remains of Canara, and though not peculiar to Jain architecture, it is in connection with Jain temples that the only really fine specimens are to be found, and these are said in Fergusson's *History of Indian Architecture* to be more frequent and more elaborately adorned than anywhere else. He gives a woodcut of one at Guruvayankere [55] which he considers a fair average specimen of its class, and describes the sub-base as square and spreading, the base itself square and changing into an octagon, and thence into a polygonal figure approaching a circle, and above a wide-spreading capital of most elaborate design. Undoubtedly the finest *stambha* remaining in the district is at Haléangadi close to Karakal, with reference to which Mr. Walhouse writes: [56] "A single shaft of stone, 33 feet in length, "stands on a high pedestal composed of three stages square at the "base, each side of which bears a large four-sided panel, filled "with an indescribably intricate design of interlaced lines, cut "sharply in relief; each different, and framed with a different "quilloched border. A band of scroll work and monsters runs "round beneath, differing in design on each side, and above there "is a deep fringe of tasselled ornament, over which the figure on "the hill is cut in relief. Above this the monolith rises in eight "segments, separated by mouldings, the first octagonal, each "face bearing a different arabesque ornament, the next two seg-"ments are sixteen-sided with every alternate face decorated, and "the following two, each with thirty-two sides, one in four being "engraved. Then comes a segment left smooth and plain, next "one with a deep tassel and fringe pattern, and lastly the capital "rests on a segment slightly narrowing, then swelling, richly "adorned with fretwork and beaded mouldings. It is not easy "to describe the capital; a broad concave moulding ribbed on the "surface bends round umbrella like over the neck of the shaft, "and above this are two other solid round mouldings, the upper "and larger supporting a solid square abacus, from whose corners "depend stone pomegranates. The whole is crowned with an "elegant shrine of four short pillars carrying a voluted canopy, "under which is an image of the deity. Nothing can exceed the

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[55] *History of Indian Architecture*, p. 276. The place is by mistake called Gurusankere.

[56] *Fraser's Magazine*, May 1875.

CHAP. II. HISTORY AND ARCHÆOLOGY.

"stately grace and beautiful proportions of this wonderful pillar, "whose total height may be 50 feet." [57]

Stambhas.

In most parts of Canara, and notably at Karakal and Mudbidri the Jain chiefs were allowed to retain power as feudatories under the Vijayanagar kings, and to some extent even under the Bednore Rájas, and consequently buildings there show merely such signs of decay as are necessarily to be found in the case of a waning faith whose adherents are gradually dying out, but Brahminical supremacy does not seem to have been obtained without leaving some traces of religious persecution behind, and at Barkúr the traditional capital of Tuluva under the old Jain Kadamba kings, and which again appears to have been a stronghold of local Jainism after the death of the royal convert to Vaishnavism, the Hoysal Ballál king Vishnuvardhana, not a single remnant of the Jain faith is now to be found, except in a state of utter ruin. The Védic Brahmins came in the middle of the eighth century as allies of the Banavási Kadambas, and there is no reason to believe that any religious war occurred at that time. Traditions differ as to whether Vishnuvardhana marked his conversion by persecution, but there seems to be no doubt that his successors' overlordship was not acknowledged by the local Jain chiefs, one of whom after a civil war attained to power in Barkúr in the middle of the thirteenth century, and it was not till nearly the middle of the fourteenth that a Vijayanagar governor was installed there. It is probable that some damage was done then, and the destruction completed in the beginning of the seventeenth century when a Lingáyat Ikkeri Rája defeated and slew Baira Dévi, the Jain Queen of Bhatcal and is said to have almost extirpated the Jains in the province of Barkúr. The present state of that place is thus described by Mr. Walhouse: "Barcore in the north of the province was of old "the capital of the Jaina kings. It must have been a vast city, "and the long lines of grassy mounds, hillocks and hollows, and "remnants of walls and masonry extend over hundreds of acres, "and upright stones richly sculptured with battle scenes or "mythological subjects may be noticed on all sides. Groves and "clusters of trees cover most of the area now with here and there "a group of houses and a temple, but always a Brahmin temple; "the conquering religion rules there, and no Jain passes through, "for the broken and headless images of his Tírthankaras may be "picked up by the dozen among the grass and bushes that have "crept over his shattered temples, and here and there one may be "seen laid before the entrance of a Brahmin temple over which "all must tread."

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[57] See remarks about Bhútal Pandiya at p. 62.

Stambhas.

With reference to the allusion to the 'conquering religion,' however, it is to be remarked that in Canara there are no traditions of religious wars and persecutions and massacres of Jains, such as prevail throughout the ancient kingdom of Madura. Jains and Brahmins seem ordinarily to have lived peaceably together, and Jain landowners at the present time take part in the management of Brahmin temples. The sweeping destruction of Jain edifices at Barkúr seems to have been quite exceptional.

Forts.

The old forts in South Canara possess little or no architectural or archæological value. The ruined fort at Barkúr is assigned by tradition to Harihara Raya, the Vijayanagar Rája, who first established his power in Canara. The old fort at Mangalore, of which only traces remain, is probably on the same site as that of the Bangar chief, which Della Valle in 1623 described as situated to the north of the Portuguese Settlement of Mangalore and destroyed by the Bednore Rája, Venkatappa Naik, a short time before his visit. The forts to the south of Mangalore, notably Chandragiri, Békal and Hosdrug, were strongholds of the Bednore Rájas, who never had more than a somewhat precarious footing in that part of the district. Probably they were in existence long before and were merely improved by the Bednoreans. The Chandragiri fort occupies a very strong position on a high hill overlooking the Chandragiri river. The Békal fort is a very large one picturesquely placed above a rocky sea-shore.

CHAPTER III.

REVENUE HISTORY AND ADMINISTRATION OF THE LAND.

Early history—Vijayanagar assessment—Bednore additions—Mysore assessments—Sir Thomas Munro's assessment—Tharáo assessment—Mr. Stokes' report—Bharti and kambharti—Mr. Blane's report—Summary of revenue history—Warg tenure—Múli wargs—Sirkár-géni wargs—Hoságame wargs—Kudutaledárs—Dhurmati and sarásari chittas—Assessment on wargs—Kumari—Nelaterige and ghar-terige—Hakkal—Waste lands—Proprietary right to waste land—Easements over waste lands—Nettikatts—Kumaki—Sub-tenures—Múlgéni—Chálgéni—Vaide-géni—Mortgages—Ináms.

CHAP. III. REVENUE HISTORY, &c.

Early history.

Of the early administration of the land revenue of South Canara little is known except what has been placed on record by Sir Thomas Munro, and the information thus recorded cannot now be amplified, or even verified, as the materials from which he derived it no longer exist. In a letter to the Board of Revenue[1] written about six months after he came down to organize the district on its acquisition by the British after the close of the last Mysore war in 1799, Sir Thomas—then Captain—Munro thus describes the records of which he was able to obtain possession:

"The great value of land in ancient times led the curnums to "adopt every expedient they could think of for the preservation of "their accounts, because they were not only a register of the public "revenue, but of all transfers of land among individuals. They "wrote their accounts in black books which lasted above a century, "and to guard against accidents they always made two or three "copies, which were distributed among different branches of the "family to be kept separately. Whenever a volume became much "worn from length of time and frequent use, a fresh copy was made, "and a memorandum was usually inserted in the title page, men-"tioning the year of Shalivahan in which it had been written, and "also the date of the original or older copy from which it had been "transcribed. The use of these registers having been prohibited "during the Mysore Government, a great part of them had been "lost from negligence and other causes, but enough still remains

[1] Dated 31st May 1800, para. 5.

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"to furnish a complete abstract of the land rent during a period "of more than four hundred years."

Early history.

None of these black books or 'kaddatams' are now forthcoming. Sir Thomas Munro states that in his time many had been lost. The remainder were called into the taluk kutcherries in the early part of the century, with the view of checking the distribution of the assessment over the different estates, and there they have been eaten by white ants and other insects, and in many cases destroyed by fire owing to the burning of the kutcherries in which they were stored.[2]

Early tradition assigns one-sixth of the gross produce as the share claimed by Government[3] up to 1252 A.D., when a local prince added about ten per cent. to this by directing that the Government share should be assessed in rice, thus throwing on the landholders the cost of removing the husk. The revenue was payable, even at that early date, either in money or in kind *at the discretion of the Sirkar*,[4] and under the rate and method of conversion adopted the money assessment was one ghatti pagoda for three 'kuttis' of land.

Vijayanagar assessment.

This arrangement continued until 1336 when, in the early days of the Vijayanagar or Byjanugger dynasty, Harihar Ráya's minister published a manual for the use of the officers of State founded on the text of Parásara with a copious commentary, in which the assessment of the land and the conversion of the grain revenue into money are elaborately dealt with. Briefly he took the Śástra rate of one-sixth of the crop as the Government share, and assuming that the average outturn was twelve times the seed sown, he distributed 30 'kuttis' of paddy, the produce of 2½ 'kuttis' of land, as follows:[5]

To the landlord, one-fourth	7½
To the cultivator, one-half	15
To the Sirkar, one-sixth	5
To the temples, one-thirtieth	1
To the Brahmins	1½
Total ...	30

[2] Sheristadar's memorandum forming enclosure to a letter from the Collector in 1830, referred to as a valuable paper in Board's Proceedings, dated 16th November 1843, para. 54.

[3] *Historical Sketches of the South of India*, by Lieut.-Colonel Mark Wilks, p. 95, *et seq.*

[4] Sir Thomas Munro's letter, dated 31st May 1800, para. 6.

[5] *Ibid.*, para. 7.

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Vijayanagar assessment.

The share of the temples and the Brahmins was collected by the Sirkar and paid over by it, so that the share payable by the landholder was really one-fourth of the estimated gross produce, and the result of the rules laid down for the conversion of this into money was that one ghatti pagoda was the revenue for 2½ kuttis of land. With regard to this Colonel Wilks remarks:[6] "It "is evident that Harihar Ráya called in the aid of the Shasters "for the purpose of raising the revenue, and did actually raise it "exactly 20 per cent. by his skill in applying that authority to "his calculations; the result of the whole detail being that he "received one ghatti pagoda for 2½ kuttis of land, the same sum "only having been paid for 3 kuttis." The Bombay High Court describe the transaction as a thinly-veiled violation of the law,[7] and state that although he affected to adhere to the Shâster, he exceeded the prescribed limit of one-sixth of the gross produce.[8]

Whether he did so or not seems really to depend upon the money-value of rice in 1336, and it is in fact simply impossible to say what was really the share of the gross produce then exacted by the Government. In arriving, on the method above described, at a money assessment which would bear any fixed proportion to the gross produce of the district, it was necessary to know three things definitely: First, the proportion of crop to seed; second, the amount of land sown; third, the money-value of the grain. With regard to the first, the Shâster proportion of 12 to 1 was taken, and, as a general average of the kind cannot apply equally well to every district, it is probable, when the climate and agricultural condition of Canara are considered, that Sir Thomas Munro was right in holding that it was too low.[9] With regard to the second, it is known that no actual measurements were made,[10] and with regard to the third, there is no reason for supposing that the available information was in any degree accurate.

Bednore additions.

Whatever the proportion of the gross produce claimed by the Sirkar may really have been, it remained unaltered until 1618 when the Bednore family imposed an additional assessment of fifty per cent., except on the Mangalore Hobli, more than one-third of the present district of South Canara, which was then held by poligars who were subjected to only a portion of this increase, and between 1618 and 1660 a special assessment was imposed on cocoanut and other fruit trees. In addition to this a number of

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[6] Wilks' *South of India*, p. 95.

[7] Canara Land Assessment Case, p. 84. [8] *Ibid.*, p. 210.

[9] Sir Thomas Munro's letter, dated 31st May 1800, para. 16.

[10] *Ibid.*, para. 8.

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Bednore additions.

paltry extra assessments were imposed on various pretexts,[11] but they were always treated as extras, and the sum of the impositions up to 1660, viz., the assessment of 1366, *plus* the fifty per cent. added in 1618, and the assessment on cocoanut and other fruit trees made prior to 1660, were alone considered and recorded in the accounts as the standard rent, *rekah*, or *shist*. As mentioned above, the Bednore additions were not so heavy in the tracts in the possession of poligars, but it is not to be supposed from this that the condition of the landholders under the poligars was better than elsewhere, for though the Bednore Rájas adhered to the principle of a fixed land rent, they did not interfere with the exaction of imposts by the poligars on their own account.[12] At the time of the close of the Bednore Government, the extra assessments and village taxes amounted to nearly twenty-five per cent. of the *shist*,[13] and with regard to the whole assessment levied in 1762 at the time of the conquest of Canara by Hyder, Sir Thomas Munro was of opinion that whatever proportion it might have borne to the gross produce, it still seems to have been sufficiently moderate to have enabled the country, if not to extend its cultivation, at least to preserve it in the same flourishing state in which it had been in earlier times.[14]

Mysore assessments.

Immediately after the conquest of Canara, Hyder ordered an investigation into the revenue, and being informed that deductions on account of waste lands had been allowed on false statements, he ordered an imposition of 30,000 pagodas on them, and on afterwards learning that the lands were not in cultivation, he ordered the amount to be added to the rent of those that were so. He ordered the extra assessment of 1711 to be imposed on the lands of potails and influential ryots who had been excused, and imposed the full fifty per cent. addition of 1618 on the poligars who had before been only partially subjected to it.[15] Between 1779 and 1782 a number of other additions were made, so that when Hyder died in 1782, the extra assessments or *shamil* amounted to more

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[11] Amongst the more important of these paltry extra assessments were the *pagadi* imposed in 1711 on account of the marriage of Basappa Naik; the *patti* imposed in 1718 for the discharge of the Mogul peshcush; the *chucker* imposed in 1720 in lieu of interest paid to soucars who advanced certain kists which the Sirkar claimed at an earlier date than had been usual in Canara, and an addition made in 1758 on account of the Mahratta Chaut.—(Sir Thomas Munro's letter, dated 31st May 1800, para. 10.)

[12] Sir Thomas Munro's letter, dated 31st May 1800, para. 16.

[13] Bombay High Court Report, appendix to vol. xii. Canara Land Assessment Case, p. 124.

[14] Sir Thomas Munro's letter, dated 31st May 1800, para. 17.

[15] *Ibid.*, para. 11.

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Mysore assessments.

than the shist or standard assessment. When Tippu succeeded to the throne he ordered the resumption of all inams, and added, in the course of his reign, a number of other new oppressive extra assessments, most of which, however, he was never able to collect.[16]

Regarding the state to which the excessive taxation imposed by Hyder and Tippu had reduced the country, Sir Thomas Munro writes :[17]

"Hyder received Canara, a highly improved country, filled "with industrious inhabitants, enjoying a greater proportion of the "produce of the soil, and living more comfortably than those of "any province under any native power in India ; but, instead of "observing the wise and temperate conduct which would have "secured to it the enjoyment of these advantages, he regarded it "as a fund from which he might draw without limit for the ex-"penses of his military operations in other quarters. The whole "course of the administration of his deputies seems to have been "nothing but a series of experiments made for the purpose of "discovering the utmost extent to which the land rent could be "carried, or how much it was possible to extort from the farmer "without diminishing cultivation. The savings accumulated "in better times enabled the country to support for some years "the pressure of continually increasing demands, but they could "not do so for ever ; failure and outstanding balances became "frequent before his death.

"The same demand and worse management increased them in "the beginning of Tippu's reign. He was determined to relin-"quish no part of his father's revenue. He knew no way of making "up for failures, but by compelling one part of the ryots to pay "for the deficiencies of the other. He made them pay not only "those which arose from the waste lands, but also of dead and "deserted ryots which were annually increasing.

"Severity and a certain degree of vigilance and control in the "early part of his Government kept the collections for some time "nearly at their former standard, but it was impossible they "could remain so long, for the amount of land left unoccupied "from the flight or death of its cultivators became at last so great "that it could not be discharged by the remaining part of the "inhabitants, and the collections, before the end of his reign, fell "short of the assessment (column 71) from 10 to 60 per cent. "The measure which he adopted to preserve his revenue was that "which most effectually destroyed it. He forced the ryots who

[16] Sir Thomas Munro's letter, dated 31st May 1800, para. 13.

[17] *Ibid.*, paras. 20 and 21.

Mysore assessments.

"were present to cultivate the lands of those that were absent, but "as the increased rent of their own lands required all their care "and labour, by turning a part of it to those new lands, the pro- "duce of their own was diminished, and they became incapable "of paying the rent of either.

"The effect of this violent regulation was to hasten the extinc- "tion of the class of ancient proprietors or landlords, for many "who might have still contrived to have held that rank had they "been permitted to confine their stock to the cultivation of their "own lands, when they were obliged to employ it in the cultiva- "tion of those of other people, and when the consequent decrease "of the produce left no surplus after paying the rent of Govern- "ment, sunk to the state of labourers. Nothing can more strongly "indicate the poverty of the country than when its lands, so far "from being saleable, must be forced upon the cultivators; but "this practice prevails more or less through Canara, and is very "general everywhere to the northward of Coondapoor."

Sir Thomas Munro's assessment.

Notwithstanding his views of the impropriety of the Muhammadan assessments, Sir Thomas Munro, in making his first settlement of the land revenue of the district under British administration, did not feel himself at liberty to depart widely from the system which he found established, and accordingly made no reductions beyond such as were absolutely necessary to ensure the collection of the rest of the revenue. Setting aside altogether such imposts as had been merely nominal, and taking the balance actually levied as his guide, he remitted all assessments on account of waste lands, and imposed a settlement on Canara and Soonda, amounting to pagodas 4,65,148, of which pagodas 2,84,604 were composed of the ancient standard land rent or 'shist,' and pagodas 1,80,545 were made up of extra assessments or 'shamil.' This settlement, he observed, was, on the same quantity of land, nearly as high as ever Hyder's was at any time, and higher than Tippu's collections were except during a few years in the early part of his reign.[18]

In reporting this settlement Sir Thomas Munro remarked that he considered himself merely as a Collector who was to investigate and report upon the state of the country, but who was to leave it to the Board to decide the expediency of lowering its assessment.[19] He then proceeded to describe the condition of the country and submit his proposals in detail. Assuming that no native Government is ever more indulgent in the assessment of its subjects

[18] Board's Proceedings, dated 15th September 1831, para. 11.

[19] Sir Thomas Munro's letter, dated 31st May 1800, para. 16.

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Sir Thomas Munro's assessment.

than the British ought to be, he thought it might be admitted that the whole of the land in cultivation ought not to be assessed at a higher rate than it was under the Bednore Government at the time of Hyder's invasion,[20] but as reductions were to be made in road customs and grain duties, which would have an effect similar to a reduction in the land rent, it would not be necessary to abandon all the Mysore additions to the assessment, and as regards the present district of South Canara he proposed that the fixed assessment of the northern portion should be the Bednore assessment, *plus* twenty-five per cent. of Hyder's additions, while for the rest of the district it should be the Bednore assessment, *plus* thirty per cent. of the additions.[21]

In a letter written about six months later, however, he reported that information since obtained had induced him to think that a smaller abatement would suffice, as many circumstances, and above all the great value attached to the possession of land, had led him to judge more favourably than he formerly did of the condition of the inhabitants of Canara.[22] Abandoning his recommendation of a hard-and-fast rule of fixing the assessment at the Bednore shist, *plus* a certain percentage of the Mysore additions, he states that he thinks many other points are entitled to as much attention as the shist which was probably extremely unequal originally and had been rendered more so by the falsification of accounts, and expresses an opinion that no guide is so sure as collection.[23] Taking this as his guide, and likewise considering the advantage which must result to particular districts from lowering the customs,[24] he states that the facility of collection and the growing confidence of the landholders convince him that his original settlement of fasli 1209 might always be collected without a balance, but as the aim of the Government should be not merely to raise a certain revenue, but to give a new spirit to agriculture and raise the country to prosperity, he thinks it necessary to recommend certain reductions, varying as regards South Canara, from twelve to thirty-seven per cent., with the object of bringing down the assessment to not more than half the net produce of the land, the result being a settlement about seven and three-fourths per cent. lower than that for fasli 1209. Being transferred from Canara before orders had been passed on this letter, he wrote,[25] at the request of the Board of Revenue, to his successors in charge of the district

[20] Sir Thomas Munro's letter, dated 31st May 1800, para. 34.

[21] *Ibid.*, para. 36.

[22] Sir Thomas Munro's letter to Board, dated December 1800, paras. 2 and 3.

[23] *Ibid.*, para. 9.

[24] *Ibid.*, para. 10.

[25] Letter, dated 9th December 1800.

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Sir Thomas Munro's assessment.

of Canara, then divided into two divisions,[26] and recommended that in settling the land rent for fasli 1210 much caution should be observed in imposing any new assessment on any land that pays the Bednore rent and half of Hyder's additions, and none should be laid on any land that pays the Bednore assessment and three-fourths of Hyder's additions. He also expressed a decided opinion that the rent of land, however productive it may be, should never on any account be raised higher than it had been at some former period, pointing out that such favourably-rated lands were very few in number, and that many of the holders in purchasing them from former proprietors had given a high price in proportion as the rent was low.[27] He further recommended that a general reduction of two and-a-half per cent. proposed by him for the settlement of that year should not, as a rule, be extended to lands which were not assessed equal to the Bednore rent and half of Hyder's additions.

The settlement for fasli 1210, based generally on these proposals, was considered by the Board of Revenue to be satisfactory, and in submitting it to Government the Board remarked that after an attentive consideration of every information relative to the province of Canara that had come before them they were impressed with a strong belief that its assessment was lighter than that of any other district under the Presidency, and that therefore any permanent remission of its land rent would be unnecessary. They also intimated an opinion that a reduction of the export duty on rice was not required.[28]

For about ten years the revenue seemed to be realized without difficulty, but in the settlement reports from 1810 to 1812 allusions were made to large demands for remissions, and an opinion was expressed that the inhabitants were beginning to feel the effects of over-assessment every year. On this the Board called for a special report, which was submitted by the Collector, Mr. A. Read, on the 17th January 1814. In this Mr. Read explained that although Sir Thomas Munro's recommendation, that the rent of an estate should never be raised "higher than it has been rated at some "former period," had been strictly adhered to, yet the same attention had not been paid to his suggested maximum of the shist with three-fourths of Hyder's additions. Increases had gradually taken place from a decline of agriculture and various causes of poverty among the ryots rendering it necessary to make up by a small

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[26] The present district of South Canara is the southern division of 1800 with the addition of the taluk of Coondapoor and two máganés of Lower Coorg.

[27] Letter, dated 9th December 1800, paras. 3 to 5.

[28] Board's Proceedings, dated 15th September 1831, para. 16.

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increase to low-rated lands the rent of others which had failed altogether.[29] In a supplementary letter he recommended a reduction of the assessment varying from four to seven per cent. in different localities.[30]

Sir Thomas Munro's assessment.

On the 28th April 1817 the Board transmitted to Mr. Read's successor, Mr. Harris, an unrecorded minute expressing regret that the *shist*, with the full amount of the *shamil*, had been declared the maximum demand, and requesting further explanations after communication with Sir Thomas Munro who was then in the district. This officer expressed his opinion that the adoption of the *shist*, with the whole of the *shamil* as the maximum liable to be imposed, was calculated rather to discourage than give confidence to the landlords, because it held over them an assessment which few would ever be able to pay; but he also stated his opinion that Canara was more able in 1817, than it was at the time it came under the British Government, to pay its assessment, and that though there had been partial failures, particularly in districts near the ghauts, the country in general had improved.[31] In forwarding this the Collector, Mr. Harris, alluded to the acknowledged inequality of the ancient assessment, and stated that in making his settlement he had been guided by his estimate of the actual productive powers of each estate, and had not limited his demand to the standard of the *shist* and three-fourths of the *shamil*, as Sir Thomas Munro had not himself adhered to it in his first settlement, and many estates assessed by him above that standard had continued ever since to pay the higher assessment.[32]

Reviewing this correspondence on the 30th October 1817, the Board remarked that the *shist* and the whole of the *shamil* was known to be greatly beyond the resources of the country, and never had been realized, and that to the approximation made to this high standard in the actual assessment on more than half the landed property in Canara they attributed the deteriorated state of the province. They were of opinion that the best standard of demand would be the average collections realized from each estate since the province had been under the British Government, and directed that the settlement for fasli 1227 should be formed on this basis.

Tharáo assessment.

The principle thus enunciated is the basis of the 'tharáo' (fixed, determined) or 'sarásari' (average) settlement, which is still in force throughout the district of South Canara, though some

[29] Mr. Read's letter, dated 1st January 1814, para. 5.
[30] Board's Proceedings, dated 15th September 1831, para. 27.
[31] *Ibid.*, para. 32. [32] *Ibid.*, para. 31.

Tharáo assessment.

modifications have been made in favour of a certain number of estates. Though the Board directed its introduction in fasli 1227, it was not found possible to do so before fasli 1229 (1819–20), owing to the necessity of references for instructions as to the applicability of the principle to certain peculiar cases, and eventually it was decided not to apply it at all to some portions of the province which now form part of the district of North Canara. It was, however, introduced throughout the whole of the present district of South Canara, with the exception of the old taluk of Puttúr, which was then attached to Coorg and was not taken over until some years later.

In their orders passed on the references above alluded to, the Board directed that the average collections should be the limit of assessment:

First.—For all estates fully cultivated and which had at various times been assessed beyond the maximum fixed by Colonel Munro.

Second.—For estates cultivated in such proportion as to be capable of yielding the maximum assessment.

Third.—For estates of which the progress of improvement had been slow under the hitherto fluctuating assessment; but if the average collections, from any considerable fluctuation in their amount, did not appear fitly to apply, it might be advisable, through the medium of a jury of neighbouring proprietors, to fix a progressive and ultimate maximum assessment.[33]

On a further reference as to whether it was intended that a new assessment should be limited in all cases to the standard of Colonel Munro, they observed that remission was chiefly required in those over-assessed estates, the revenue of which it had not been practicable to raise beyond Colonel Munro's standard, or which, though assessed at it, had been unable to pay it; that on the other hand many of the estates, which had been assessed above Colonel Munro's maximum, were understood to be fully capable of paying their present assessment. They accordingly desired that the average collections might be taken as the basis of the new settlement, but that in applying that standard the Collector should personally grant such remission for a term of years not exceeding ten, as particular estates might require: it was supposed that in a few cases he might find it proper to raise the assessment beyond the standard of the average collections. Finally, the Collector was informed that he must endeavour to keep the aggregate of the

[33] Board's Proceedings, dated 15th September 1831, para. 36.

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Tharáo assessment.

remissions within the total reduction that had been estimated by him.[34]

The correspondence having been submitted for the orders of Government, the instructions issued were approved, and the Collector was authorized to make such remissions in the settlement of the year as might be found to be necessary.

From Mr. Harris's report for fasli 1229, the first year of the 'tharáo' or 'sarásari' settlement, it appears that of the revenue of the portion of the province to which the 'tharáo' was applied, sixty-seven per cent. came from estates assessed above Sir Thomas Munro's maximum, twenty-one per cent. from estates assessed at that maximum, and twelve per cent. from estates assessed below it.[35] Of the estates assessed below Sir Thomas Munro's maximum the majority were assessed at rates exceeding the average collections but much below that formerly entered as the old assessment, to which the estate was still held to be liable, and in explanation of his adopting rates in excess of the average collections, Mr. Harris remarked :

"In his patta the ryot had that ancient *béris* inserted, together "with his annual assessment, which was very far below it. It "may, therefore, be well imagined the effect this discouraging load "of nominal *teerva* had upon his exertions; as, on the other hand, "the removal of it may now lead to a fair expectation of its bene-"ficial consequences, and as a stimulus to exertion in bringing his "lands into more complete cultivation."[36]

The above explanation applies to most of the cases, but a number of the estates in inaccessible parts and at the foot of the ghauts were assessed at the *shist* only, because the actual state of the lands was not sufficiently known to enable the settling officer to come to a final decision as to what would be a suitable assessment.[37] During the eleven years succeeding the introduction of the 'tharáo' assessment, the annual settlement never came up to the 'tharáo' standard; low prices led to difficulty in realizing the demand of each year; successive Collectors represented the prosperity of the district as on the decline owing to the highness of the assessment, and as these statements seemed to be borne out by riotous assemblages or 'kúts' in the year 1831 in which the ryots met together and tumultuously declined to pay their kists, the Government deputed[38] Mr. Stokes, the Third Member of the Board of Revenue, to inquire into the state of the district.

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[34] Board's Proceedings, dated 15th September 1831, para. 39.

[35] *Ibid.*, para. 46.

[36] Settlement Report for fasli 1229, para. 16.

[37] *Ibid.*, para. 19.

[38] Minutes of Council, dated 8th March 1831.

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Mr. Stokes' report.

Mr. Stokes found that the 'kûts' had not been caused by the state of the assessment,[39] but had been suggested, fomented and sustained by the intrigues of the Head Sheristadar and other Brahmins for the purpose of throwing discredit on the administration of the Collector, and effecting the removal of the Naib Sheristadar and other Native Christians employed in the department. In addition to the direct evidence on this point, he drew attention to the punctuality with which the revenue had been realized since the disturbances, and expressed an opinion that all unfavourable inferences regarding the assessment deduced from the occurrences of 1831 might therefore be discarded.[40]

On the question of the assessment of the district he formed a very decided opinion that reduction was called for in a few cases only, and that to attempt any general modification of it would be as unnecessary as it was dangerous.[41] In explanation of the different opinions formed by the Collectors, he pointed out that there were no accounts of the rent produce of the land, except in the case of estates which were known to be over-assessed; that a Collector's duties familiarize him almost exclusively with the dark aspects of his district; the poor obtruding their circumstances on his attention, while the wealthy try to evade observation.[42] Even if poverty existed, it was not necessarily due to over-assessment, though it was manifestly to the interest of the ryot to make it appear that it was so,[43] and he further doubted whether the agricultural classes really were poor, pointing out that the poverty had been inferred to some extent from the frequency of transfers of land as compared with other districts, which might really be due to the land being more lightly taxed and having a greater saleable value, in support of which latter view he showed that the sales were most frequent in the lightest assessed taluks,[44] the lands being usually bought by men of capital as a desirable investment for money.[45] He admitted that the fall of prices must have tended to increase the pressure of the assessment, and in some cases might have caused distress, but he considered that temporary relief was all that was required until it was known that the fall was permanent, and such relief had been amply afforded.[46]

Referring to the want of detailed accounts which had been so much deplored, he remarked that this want was a strong presumptive proof of the lightness of the assessment, as, if the ryots had

[39] Mr. Stokes' report, dated 12th January 1833, para. 13.
[40] *Ibid.*, paras. 14 and 15.
[41] *Ibid.*, para. 6.
[42] *Ibid.*, para. 22.
[43] *Ibid.*, para. 23.
[44] *Ibid.*, para. 26.
[45] *Ibid.*, para. 27.
[46] *Ibid.*, para. 36.

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Mr. Stokes' report.

believed their resources were over-estimated, they would rather have demanded, than resisted as they did, close scrutiny into the circumstances of their estates.[47] Taking such accounts as were available, he pointed to the steadiness of the settlements and the general success with which they had been realized,[48] to the small number of distraints[49] and to the increase of cultivation,[50] as arguments in favour of the moderateness of the assessment.

Such distress as was occasioned by over-assessment he attributed entirely to the inequality of its distribution, as an assessment unequally distributed must necessarily press injuriously in particular cases,[51] and he showed that the tendency to inequality, which is to be found everywhere, had been aggravated in Canara by the Shánbógs having availed themselves of the confusion, incident to the transfer of the province to a new power, to make many fraudulent alterations in the public accounts,[52] while the apportionment of the assessment on sub-divided estates had prior to 1820 been left to the discretion of the parties and was frequently arbitrary or designedly unequal.

The remedy he recommended was the extension of the principle of the 'tharáo' assessment, which was, by fixing the maximum demand on each estate at an easily attainable standard, to encourage improvement, and put an end to the annual fluctuations in the settlement. The adoption of the average collections had answered well as a rule, but in some cases these collections had been greater than was consistent with the prosperity of the estate, and where a rate above the average collections had been adopted it was often not adapted to the circumstances of the estate owing to the want of information regarding the actual rent produce.[53] He therefore considered that in the case of estates on which the 'tharáo' assessment was believed to be too high, a careful scrutiny of their circumstances should at once be made with the object of calculating the rent produce of all the fields and fixing the assessment on the estate at a stated proportion varying perhaps from forty to seventy per cent.[54] In such cases, the boundaries should, he thought, be recorded and, where the proportion of uncultivated land was large, a portion of the full demand should be suspended for a term of years.[55]

When the standard had thus been reduced to a level always under ordinary circumstances easily attainable, he thought that the demand should seldom be disturbed by remissions, as had up

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47 Mr. Stokes' report, dated 12th January 1833, para. 50.

48 *Ibid.*, para. 51. 49 *Ibid.*, para. 53. 50 *Ibid.*, para. 54.

51 *Ibid.*, para. 61. 52 *Ibid.*, para. 59. 53 *Ibid.*, para. 63.

54 *Ibid.*, paras. 65 and 66. 55 *Ibid.*, para. 67.

to that time been done usually on a consideration of the circumstances of the ryot rather than of the state of his land.[56] He also deprecated the practice of allowing the collections to lie over as an act of indulgence.[57]

Bharti and kambharti.

The settlement for fasli 1243 (1833–34) was conducted by the Collector, Mr. Viveash, in accordance with the views expressed in Mr. Stokes' report, and the settlement reports for that and the preceding fasli, as well as Mr. Stokes' report, were reviewed by the Board in their Proceedings, dated 11th January 1836, No. 24.

Mr. Viveash divided all estates into two main heads:[58]

(1) *Bharti*, or those able to pay the full 'tharáo' assessment.

(2) *Kambharti*, or those unable to pay the full 'tharáo' assessment.

The second class he sub-divided as follows:

(1) *Vaide*, those to be advanced to the full demand by instalments.

(2) *Board siphâras*, those on which a permanent remission was recommended.

(3) *Taniki*, those whose resources were still under investigation.

The Board of Revenue considered the arrangement likely to be beneficial both to the proprietors and to Government, but before confirming it they thought it necessary to call for further information in order that the proposals might be examined in detail[59] and issued full instructions as to the nature of the information desired and the manner in which it should be obtained.

The reports submitted in accordance with this call were reviewed at length in Board's Proceedings, dated 16th November 1843, in which, after expressing an opinion that inequality in the distribution of assessment should be adjusted by a revision of the bériz and not by a sacrifice of revenue,[60] they arrived at the conclusion that the latest revision of the assessment had not been more successful than the preceding attempts directed to the same end. The principal object, that of a fixed and permanent revenue, had not been obtained, nor had the revenue been materially increased. This unfortunate result appeared to the Board to be in no degree chargeable on the local officers, but to be entirely owing to radical errors in the revenue system of the district, occasioned by the absence of correct registers of the land and to the defective

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56 Mr. Stokes' report, dated 12th June 1833, para. 73.

57 *Ibid.*, para. 76.

58 Board's Proceedings, dated 16th November 1843, No. 602, para. 7.

59 Do. dated 11th January 1836, para. 14 *et seq.*

60 Do. dated 16th November 1843, para. 36.

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Bharti and kambharti.

character of the accounts generally.[61] After showing in detail that there was no regular system of accounts in the district and that those in use were inaccurate, they remarked that even if the *rekha* or 'shist' had been founded on accurate data, which it was not, the extra cesses composing the 'shamil' were limited only by the ability of the ryots to bear them, and the principle of the 'tharáo' was liable to similar objections, for a tax regulated by past collections alone must fall to a great degree on the means and industry of the cultivator, not on the land.[62] Though the assessment, as a whole, was extremely moderate, it could not be easily borne unless redistributed, but all attempts to do so had ended in failure through the fallacious nature of the accounts, and similar disappointment must necessarily follow the further prosecution of schemes founded on the same data.[63]

The Board then proceeded to consider the plans which had at different periods been suggested to remedy these evils, and expressed their opinion that the only decided remedy which would enable the Revenue officers to introduce a more equable and fair settlement was a survey founded on an entire measurement of the lands. The advantages of such a measure considered by itself they held to be indisputable, the objections being its expense, its interference with the existing state of property and of conveyances executed in anticipation of the permanency of the present state of things, and the consequent distrust and dissatisfaction which would be engendered. The expense they thought would be in some degree compensated by the increased revenue derived from concealed and misappropriated land. The Government were in no way pledged to the permanency of the present state of things, and the ample evidence of fraud and encroachment deprived of all force any objections to interference with the existing state of property,[64] while distrust and dissatisfaction might be got over by conciliation and decision.

The above Proceedings of the Board of Revenue and a later Proceedings, dated 3rd September 1846, were reviewed by Government on the 2nd January 1847, and on a consideration of the strong representations against a survey made by a Collector of experience, who had, however, not been in possession of the Board's views and arguments as expressed in their Proceedings of the 16th November 1843, they were not disposed to proceed further in the matter until the opinion of the then Collector had been obtained, and he was accordingly instructed to give his deliberate and best consideration to the subject and submit his views

[61] Board's Proceedings, dated 16th November 1843, para. 41.
[62] *Ibid.*, para. 62. [63] *Ibid.*, para. 63. [64] *Ibid.*, para. 69.

at as early a period as might be consistent with the attainment of sufficient local experience.

Mr. Blane's report.

In accordance with this call Mr. Blane submitted a very able and exhaustive report on the 20th September 1848. After expressing his concurrence with the remark made by the Board of Revenue "that the district generally has greatly improved in "wealth and prosperity, but that the revenue, so far from indicating that any improvement has taken place, would rather tend "to the opposite conclusion, and that too where the progress of "improvement has been the most rapid and perceptible,"[65] he instanced in support of this view the immense increase in population and agricultural stock, the flourishing cocoanut plantations everywhere springing up on the coast, the extension of cultivation over the waste lands, the difficulty of procuring land for purchase and the increase in the price paid for it, the facility with which it was let to tenants and sub-tenants, the obstinacy with which the possession of the smallest spot was contested, and the shameful manner in which every species of fraud and forgery was perpetrated to obtain or hold possession of it.[66] Alluding to the inequality of distribution, which led to an assessment light as a whole being unduly heavy in particular cases, he accounted for it by supposing that in the lapse of time and by the frauds of the shánbógs favoured by each successive change of government, the true *rekha* or 'shist' had in point of fact been gradually abandoned and lost. Under the Mussulman government the use of the old registers of lands had been prohibited, and a great part of them had been lost, and the native accountants or shánbógs, by whom these had been kept, had all been dismissed and their places supplied by strangers, and when estates were found paying not so much as one-tenth of their produce, he thought it might be ascribed to the success with which influential landholders, the shánbógs, and their relations and friends were enabled to conceal the actual state of their farms and lower the original assessment.[67] Under the old government assessments were frequently unfairly distributed upon the estates of the poorer ryots in order to relieve rich and influential landholders,[68] and in accepting as genuine documents the accounts furnished by the shánbógs, we were from the very commencement building on a rotten foundation.[69] With regard to the 'tharáo' assessment, he pointed out that Canara had never been in such a depressed state as it was at the time it

[65] Mr. Blane's letter, dated 20th September 1848, para. 3.

[66] Board's Proceedings, dated 3rd September 1846, para. 17.

[67] Mr. Blane's letter, dated 20th September 1848, para. 14.

[68] *Ibid.*, para. 15.

[69] *Ibid.*, para. 16.

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Mr. Blane's report.

came under the British Government, and that an average of seventeen years which immediately succeeded to such a state of affairs would necessarily be nearly the lowest which could be adopted.[70] To take the average of these first years, therefore, amounted to little less than to make the revenue, when nearly at its lowest ebb, the basis of all future demands, and exclude from the calculation all prospect of improvement hereafter.[71] Remissions on account of uncultivated waste belonging to the estate were thus practically made at the 'tharáo' without any provision for re-imposing the assessment when the lands were again cultivated, nor was the waste land separated from the estate,[72] and, in addition to this, the absence of any public record of the extent of any man's land made it impossible to check an encroachment on Government waste under the pretence that it was within the limits of an estate.[73] In cases in which reductions were made on a consideration of the circumstances of an estate, they were based on returns of produce prepared by the shánbógs, which were scarcely ever correct and often grossly fraudulent, as might have been expected, when there was nothing to check them except entries of the 'bíjwari' or amount of seed required to sow the rice land in old accounts, which themselves were totally untrustworthy, while as regards the cocoanut garden land there was not even this amount of check, the produce being calculated only on the actual number of trees then standing.[74] These views he supported by a memorandum of cases selected from the limited number in which the 'bíjwari' accounts had been tested by a survey.

In paragraph 50 of his report, Mr. Blane summarized as follows the causes to which he attributed the stationary amount of the land revenue:

First and principally, to the fraudulent lowering of the assessment upon valuable estates by means of the false accounts of the shánbógs and to its imposition either upon inferior estates which could not bear it, or on land which only appeared in the accounts but had no existence at all.

Second, to the re-occupation of waste lands formerly cultivated but abandoned, and the assessment of which had in point of fact been gradually remitted and deducted from the *bériz*, although the lands were not formerly separated from the estates to which they had belonged.

Third, to the cultivation of waste lands, never before cultivated, but claimed as grazing grounds and jungles attached to the cultivated lands.

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70 Mr. Blane's letter, dated 20th September 1848, para. 21.

71 *Ibid.*, para. 22.

72 *Ibid.*, para. 38.

73 *Ibid.*, para. 46.

74 *Ibid.*, paras. 28 and 29.

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Fourth, to the concealed appropriation, without any actual claim being advanced, of lands belonging to Government.

Mr. Blane's report.

The Board having decided that "inequalities should be adjusted by a revision of the *bériz*, not by a sacrifice of revenue," and having also observed in another Proceedings that the old maximum assessment should not be interfered with except in cases of proved fraud, Mr. Blane pointed out that the total absence of information regarding the boundaries or even the extent of estates made it impossible definitely to prove fraud, and that if the ancient assessments were to be adhered to, inequalities must of necessity continue.[75] "It would be in vain," he says, "and "worse than useless for me to attempt to blink the fact that no "such revision or equalization of the assessment could be effected "without abandoning the system which has hitherto formed the "basis of all previous settlements, viz., a standard maximum of "assessment upon estates, the limits and resources of which have "never been hitherto ascertained or defined, and this standard "maximum or ancient bériz, as it has been called, derived only "from the accounts of interested district servants, which are now "admitted on nearly all hands never to have been deserving of "credit. It would be necessary, in short, to re-assess the land on "some equitable and uniform principle."[76] It was unquestionable that an accurate survey would be a measure of the greatest utility and benefit if only as a record of private rights which had never been adequately defined and were daily becoming more complicated and difficult of adjustment,[77] and with reference to the objection urged by his predecessor that such a measure as a survey "would be to overturn the ancient principle on which the "land revenue of Canara was fixed," Mr. Blane pointed out that it would be rather to revert to or restore the ancient principle of the assessment by a given portion of the produce, which had already been overturned by frauds, encroachments and false accounts.[78]

Having thus given his decided opinion that a survey would be a measure of the greatest utility and benefit, that no satisfactory revision of the assessment was possible without it, and that it could not be objected to as the abandonment of any ancient recognized principle, Mr. Blane remarked that he had not access to the records necessary to enable him to form a judgment on the correctness of his predecessor's statement that the 'tharáo' assessment had been guaranteed to the people by every pledge that Government can give "and that its very name was a guarantee

[75] Mr. Blane's letter, dated 20th September 1848, paras. 55 to 57.

[76] *Ibid.*, para. 70.

[77] *Ibid.*, para. 69.

[78] *Ibid.*, para. 71.

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Mr. Blane's report.

for its fixity,"[79] but apprehended that although no specific pledge might have been given, neither the Board nor Government would be inclined to withhold a due consideration of expectations which the people might have been led to entertain of the various exchanges of property and other transactions which had taken place in reliance upon the permanency of the 'tharáo' settlement, and of the disappointment which would be occasioned thereby when they found them not destined to be realized.[80]

Mr. Blane's long and valuable report concluded with the following warning against a revision with the view of increasing the general rate of assessment:

"If there be anything contained in this report, as I fear there "may be, tending to the inference that I am an advocate for "a high assessment, I am desirous, before concluding, of most "earnestly disclaiming it. No one who has served in so many of "the districts of this Presidency as I have can, on coming to "Canara, fail to observe and appreciate the blessings of a light "assessment and an indulgent settlement. Though it may appear "a paradox, it may, nevertheless, I think, be assumed that the "very ignorance which I have endeavoured to show has ever "existed, and still continues, in regard to the resources of the "country, has in no small degree contributed to the rapid in-"crease of its prosperity which is now so apparent, for no one "can doubt that the energies of the people are more likely to be "stimulated by the prospect of enjoying the full and entire profits "of their exertions than where these have to be shared with the "Government, in however moderate a proportion. As little can "it be doubted that, with the ideas which prevailed thirty or forty "years ago as to the share of the produce which the Government "might fairly exact, no such liberal settlement as would now be "deemed politic and just would at that time have been accorded, "and the consequence would have been that the advancement of "cultivation and general improvement would have been retarded. "This, indeed, is apparent from the rates which are now in force "regarding the apportionment of the estimated produce in newly "occupied lands, by which one-third of the gross produce is "assumed as the Government share and by the high rate put upon "all new land taken up for garden cultivation. Could these rates "really have been exacted I am under the fullest persuasion that "little increase in cultivation would actually have taken place; "and we might have the example in Canara, as in other parts of "the country, of thousands of our labouring population leaving "their homes to seek employment in foreign countries in place of

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79 Mr. Blane's letter, dated 20th September 1848, para. 73.

80 *Ibid.*, para. 74.

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"finding an ample demand for their labour at home, as they now "do in Canara."[81]

Mr. Blane's report.

Mr. Blane's report was not reviewed by the Board of Revenue until May 1851, by which time Mr. Blane was himself a Member of the Board and had an opportunity of recording his matured opinion on points upon which as Collector he had not thought it necessary to offer a distinct recommendation.[82] Looking to the expense of a general survey and the fact that there were other districts which it was more necessary to survey first, he recommended for Canara only a small survey establishment to be attached to the Collector's office and employed in examining and measuring such estates as were considered most to require it.[83] On the question of disturbing the tharáo settlement, he expressed himself as follows:

"10. I have had some doubts whether it would be advisable "that he (Collector) should disturb what is called the tarow "settlement under any circumstances, but on the whole I have "come to the conclusion, that though as a general instruction he "should be directed not to interfere with it without ample cause, "yet there are some cases of manifest fraud or encroachment, and "of needless reduction of the ancient bériz, such as I have given "instances of in the appendix to my report, which the Govern-"ment is by no means called upon to perpetuate, and has both in "reason and equity the fullest right to rectify when they have "been brought to light.

"11. As an act of indulgence, and in consideration of long "tenure, I would in no such cases impose more than a very light "additional assessment, and with this view I would lay it down as "a rule, that additional assessment should not be imposed where "it already amounts to one-fifth of the gross produce of the "estate."[84]

With their Proceedings, dated 8th May 1851, the Board of Revenue sent up to Government Mr. Blane's report and the minutes recorded by two of the Members of the Board, and submitted recommendations substantially in accordance with the proposals made in Mr. Blane's minute.

The Government deferred dealing with the proposals until they obtained the opinion of the First Member who was then on deputation as a Special Commissioner, and further consideration of the matter appears to have dropped. With the general improvement in prices the pressure on particular estates which used to bring the question of the assessment into prominence

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81 Mr. Blane's letter, dated 20th September 1848, para. 102.
82 Mr. Blane's minute, dated 5th March 1851, para. 5.
83 *Ibid.*, paras. 7 and 8.
84 *Ibid.*, paras. 10 and 11.

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Mr. Blane's report.

ceased to be felt, and the survey of the southern division of Canara which alone remained attached to the Madras Presidency after 1862 was treated merely as part of the general scheme for the extension of a revenue survey throughout the Presidency.

In a letter to the Government of India, dated 9th February 1880, reviewing the progress of the revision of settlement in this Presidency, the Madras Government having stated that the settlement of South Canara was based on a fixed maximum demand which had been obtained in the majority of cases, the Government of India[85] drew attention to the fact that the question of the permanency or otherwise of the North Canara assessment had been judicially raised and decided in favour of Government in the Bombay High Court, and called for such a report on the settlement of South Canara as would enable the Governor-General in Council to judge whether the claims of the State could there be advanced with the same success as had been attained in North Canara. The Collector's report on the subject was reviewed by the Board of Revenue in their Proceedings, dated 11th November 1882, No. 2747, in which they expressed their opinion that nothing could be clearer than that the Government had never in any way pledged itself not to revise the assessment, and as they believed that a revision of assessment in Canara was expedient in the interests both of the State and of the revenue-payers generally of the Presidency, they submitted proposals for a settlement on principles which they thought would secure the interests of the State at a minimum of violence to private rights and existing institutions and conditions. The Government[86] agreed with the Board of Revenue and the Collector that there is nothing to show that they were in any way pledged to maintain the present assessment unaltered, and, in justice to the inhabitants of the other parts of the Presidency, they recognised the necessity for the revision of the demand on the district, in order that it might contribute its fair share to the necessities of the State. The survey would, therefore, be extended in due time to South Canara and be followed by a revision of the terms of settlement on such a basis as might appear expedient when the time arrived for commencing operations.

Summary of revenue history.

The settlement now in force throughout the whole of the South Canara district, except the small portion once attached to Coorg, is therefore the 'tharáo' settlement of 1819, with certain modifications. As above shown the original basis of this was a one-sixth share of the gross produce[87] of a roughly-estimated area

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[85] Letter, dated 6th July 1880, No. 301.

[86] G.O., dated 18th April 1883, No. 459.

[87] Sir Thomas Munro's letter, dated 31st May 1800, para. 7.

Summary of revenue history.

of cultivation, the measure of extent (*bíjwari*) being that which could be sown by a given amount of seed, and the proportion of produce to seed, twelve to one, as given in the Śástras.[88] Besides the one-sixth a further share was taken for the Brahmins and the gods[89] and additions were made to the assessment and extra cesses added from time to time in accordance with the necessities and the power of the ruling dynasties, until at last in the time of Tippu the nominal demand was much higher than the country in its then state of prosperity was in any way able to bear.[90] Though the assessment was theoretically in proportion to the 'bíjwari' of each holding, the early princes did not trouble themselves with the details of distribution, which were left to the *poligars* and *potails*,[91] and in some cases the *poligars* and *potails* were strong enough to resist the imposition of new cesses on them,[92] though it is not on this account to be inferred that they did not themselves levy them from the landholders.[93] Hyder was strong enough to impose them on all, but he openly disregarded equality of distribution and directed that the demand on lands out of cultivation should be levied from those which were being cultivated.[94] The only accounts showing the local incidence of the revenue in the old days seem to have been the 'kaddatams' or 'black books' kept by the *shánbógs*, but their use was prohibited under the Mysore Government and many of them had been lost before the commencement of the British administration.[95] The distribution of assessment in the early British settlements was, therefore, made on returns supplied by *shánbógs* and reports made by the ryots themselves.[96] No information was available as to the boundaries or extent of a man's holding, and the very word used for a holding 'warg' merely meant the 'account' against a ryot for his estate,[97] which was not necessarily a compact block, but often consisted of scattered fields, sometimes even in different villages.[98] As the first assessment made by Sir Thomas Munro was nearly as high as that of Tippu, except that remissions were made on account of land lying uncultivated, it was at first thought that considerable reductions would be necessary, but as the country was growing in prosperity an opinion arose that the demand was moderate enough. The

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88 Sir Thomas Munro's letter, dated 31st May 1800, para. 7.

89 *Ibid.*, para. 7.

90 *Ibid.*, paras. 9 to 16.

91 Sheristadar's memorandum forming enclosure to Collector's letter to Board, dated 18th June 1830, para. 11, sec. 13.

92 Sir Thomas Munro's letter, dated 31st May 1800, paras. 9 to 11.

93 *Ibid.*, para. 16.

94 *Ibid.*, para. 11.

95 *Ibid.*, para. 5.

96 Mr. Blane's report, dated 20th September 1848, paras. 14 to 16.

97 Bombay High Court Reports, appendix to vol. xii. p. 19.

98 Mr. Blane's letter, dated 20th September 1848, para. 59.

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Summary of revenue history.

prevalence of low prices for many years, however, led to the unequally distributed assessment pressing with great severity upon some estates, and the 'tharáo' assessment was introduced, based, as far as possible, without making what seemed undue reductions, on the average collections on each estate since the commencement of the British administration.[99] This did not, however, afford the full relief anticipated, and in 1833 the estates assessed at 'tharáo' rates were divided into—

(1) *Bharti*, those paying the full 'tharáo' rate.

(2) *Kambharti*, those not paying the full 'tharáo' rate.

The latter being sub-divided as follows:[100]

(1) *Vaide*, those to be advanced to the full demand by instalments.

(2) *Board sipháras*, those on which a permanent remission was recommended.

(3) *Taniki*, those whose resources were still under investigation.

Though the arrangement was approved in principle, it was not formally confirmed pending receipt of further information. With the rise in prices the pressure of over-assessment on the less favoured estates ceased to be a source of difficulty, and attention was attracted on the other hand to the fact that, though the country was growing in prosperity, the land revenue was practically stationary. After full consideration, it has been decided that this can only be rectified by a general survey and revision of assessment, such as is now going on in other parts of the Presidency and will be extended to South Canara in due course.[101] In the meantime, the arrangement of 1833 continues, the demand including assignments to temples, &c., being as follows:

	Wargs.	Assessment.
	NO.	RS.
Tharáo bharti	41,057	13,18,536
Kambharti	2,501	96,316
Total ...	43,558	14,14,852

The further sub-division into *vaide*, *Board sipháras* and *taniki* is now not much attended to. The reduction on the majority of *kambharti* estates is practically regarded as permanent under the existing settlement and only in a small number of cases is it considered necessary to have an annual scrutiny.

[99] Board's Proceedings, dated 15th September 1831, paras. 36 to 46.
[100] Do. dated 16th November 1843, para. 7.
[101] G.O., dated 18th April 1883, No. 459.

Summary of revenue history.

As above stated, there is a small portion of the district to which the 'tharáo' assessment was never applied. The two máganés of Amara and Sullia had been attached to Coorg for about two hundred years before the commencement of the British administration, and the other máganés of the old Puttúr taluk were made over to Coorg in 1804 as a reward for services rendered during the war with Mysore. When Coorg was annexed in 1834 these máganés were all given back to Canara, and, at the first settlement made afterwards, the assessment fixed by the Coorg Government in Amara and Sullia in the year Ángirasa (1812) was taken as the maximum or *bharti* demand for these máganés, and in the other máganés the *bharti* assessment adopted was the ancient *shist* and *shamil* recorded in the British accounts before the cession to Coorg in 1804.

Warg tenure.

In his first long report on the South Canara District, Sir Thomas Munro wrote as follows:

"I have been the more particular in describing the obstacles "I met with in the settlement of Canara, because, except in the "districts claimed by poligars, they originated entirely in the "inhabitants having once been in possession of a fixed land rent, "and in their still universally possessing their lands as private "property,"[102] and in a later letter he explained that most of the petty chiefs that at ancient times existed in Canara had long since been deprived of all authority and confounded with the mass of the people, and that even the three more important poligars or Rájas of Kumbla, Vittal and Niléshwar, who were then attempting to establish themselves in these districts, had been under the Bednore Government mere hereditary managers of districts, paying not *peshcush* but a rent nearly as high as that paid by *potails* or ordinary renters of districts of equal value.[103]

The exception of the *poligar* districts in the above extract refers to the limitation of the obstacles and not to the nature of the tenure of the landholders, and it thus appears that when the British took over the district of Canara the landholders held their land as private property, but not on a fixed land rent. This point is of importance, as, in the many discussions which have occurred regarding the nature of the tenures of Canara, it has frequently been argued that a fixed rent or assessment is an indispensable element in private property, and that an admission of the existence of the latter necessarily implied an admission of the former.[104]

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[102] Sir Thomas Munro's letter, dated 31st May 1800, para. 4.
[103] Do. dated 16th June 1800, paras. 1 and 2.
[104] Bombay High Court Reports, appendix to vol. xii. pp. 210–212.

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Warg tenure.

In the first of the letters above quoted, Sir Thomas Munro goes on to say that as far as can be gathered from traditions and accounts, it appears that in the fourteenth century the whole of the lands were parcelled out among a prodigious number of landholders paying annual rent in various gradations from five to five thousand pagodas, the average being about fifty pagodas.[105] The alienation of land by sale or otherwise was unrestrained, but nothing but gift or sale or non-payment of rent could take it from the owner. The description given by Sir Thomas Munro applies practically to the tenure of the present day. The estates are known by the name 'wargs,' the word *warg*—from the Sanskrit *varga* a leaf—having originally been used for the leaf accounts kept by the Revenue authorities. In the progress of time the term came to denote the holding for which the account was kept. Though the theoretical basis of the assessment was a share of the produce of each field, the assessment was never fixed on particular fields or portions of a warg, but is a lump assessment for the whole, even although as occasionally happens, the estate or warg is composed of unconnected parts which may be even in different villages. The *wargs* or estates are of two kinds, *múli* and *géni*, and these are classified as '*kadím*' and '*hoságame*' according as they were formed before or after the commencement of the Company's Government.

Múli wargs.

The 'múli' tenure is the characteristic tenure of Canara and the position of the *múlavargdár* with regard to Government has been definitely settled in the suit Vyakunta Bapuji *v.* the Government of Bombay, reported in the appendix to volume xii. of the Bombay High Court Reports, printed in 1876. In the judgment in that suit the origin of the term is explained as follows:

"Wilson, in his Glossary (page 542), says that in Karnata " (Canarese) it signifies an ancestral hereditary estate, and that "*múlavarga* means original proprietary right in land, and that "*múlavargdar* (corruptly *moolwargdar* or *moolgar*) is the pro- " prietor of an ancestral hereditary estate. *Múla* is derived from "the Sanskrit *múl*, signifying literally a root and figuratively, " *inter alia*, the root of a tree or origin of a family. Hence " arises the character of permanence or perpetuity which we find " in it when used in composition as in *múlavarga* and *múlvarg-* " *dar* above instanced, and as also in *múl-gaini* presently to be " again mentioned."[106]

After a full consideration of the revenue history of the country and the question of the bearing of proprietary right on

[105] Sir Thomas Munro's letter, dated 31st May 1800, para. 22.

[106] Bombay High Court Reports, appendix to vol. xii. p. 19.

Múli wargs.

fixity of assessment, the High Court arrived at the conclusion that the *múli*, the *mirási*, the *kániyátchi*, the *svasthyam* and *janmakári* tenures are merely so many various names for the ancient proprietary right of the ryot in the soil recognized by Mr. Ellis of Madras, Mountstuart Elphinstone, Lord William Bentinck, Professor H. H. Wilson, the Madras Board of Revenue and other eminent authorities, that this proprietary right was subject to payment of the sovereign's share of the produce as assessment, that no fixity of assessment existed prior to the British conquest,[107] and that the assessment had not become unalterably fixed in law since the British acquisition of Canara.[108] In arriving at this conclusion, no binding decision was given with regard to the effect of the 'tharáo' settlement as it had not been applied to the lands forming the subject of the suit, but in the course of the judgment it was pointed out that when the Board submitted the principle of the 'tharáo' for approval, the Government authorized the Collector to make a settlement on that basis for that year and it was admitted by the plaintiff's counsel that no final sanction has been accorded to the *tharáo* system by Government.

Sirkar-géni wargs.

Géni or *Sirkár-géni wargs* are estates which have escheated to Government by lapse of heirs, or by abandonment by proprietors. During the time of the Mysore Government when the exactions of Hyder and Tippu and their officers were more than many estates could bear, such escheats were very numerous, but in a large number of cases the lands were still cultivated by tenants or 'génigars,' who were either the old tenants, or new occupiers put in by Government, and who paid their rent direct to the 'Sirkár,' hence the name 'Sirkár-géni.' During the early years of the British administration efforts were made to induce people to come forward to take up the 'múli' right of these escheated lands, formal title-deeds called 'múl-pattas' being granted on favourable terms conveying to the grantee full proprietary[109] or 'múli' rights within specified boundaries, and they were eventually offered to all tenants on *Sirkár-géni wargs* in a circular order by the Collector, Mr. Viveash, dated 24th October 1834, in which, after stating that either *múl-pattas* would be issued, or the lands would be entered as 'múli' in the accounts on application being received, it is added: "In the event of the "*múl-pattas* not having been obtained or the lands not having been "entered in (the accounts) as '*múli*,' even though (the lands) be "included in the *Sirkár-géni*, he who has, up to this time, paid the

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107 Bombay High Court Reports, appendix to vol. xxi. pp. 210–212.

108 *Ibid.*, pp. 214, 215.

109 Indian Law Reports, Bombay Series, vol. iii. 1879, pp. 552–555.

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Sirkar-géni wargs.

"full assessment according to the settlement, will be in the same "position as the múlgar so long as he continues to pay the full "assessment according to the settlement." But few of the holders thought it necessary to apply for either múl-pattas or change of the designation in the accounts, and the full effect of Mr. Viveash's circular seems to have been somewhat lost sight of, for in 1853 [110] the Government formally sanctioned a proposal to concede to the occupants of *géni* estates proprietary right whenever they were desirous to claim and exercise it. Then also it was proposed to give *múl-pattas*, but the issue of these documents was suspended by the Board in 1859,[111] and further information called for in view to a modification of the form in use which seemed to give away rights over waste and forest land which it had not been intended to give. In 1867, the Collector reported that, though it had not yet been legally decided that a *géniwargdár* could not be ousted otherwise than under Special Acts, there was in practice no more than a nominal difference between him and a *múlwargdár*, and the Board concurring with him considered the issue of 'múl-pattas' unnecessary.[112] In the North Canara Forest case it was held that "the proclamation of Mr. Viveash in 1834 guaranteed "the géniwargdar who should pay the amount of his jamabandi in "every instance against eviction equally with the múlgar" and it, therefore, seems that the legal position of the *Sirkár-géniwargdar* and the *múlawargdár* is exactly the same.

Hoságame wargs.

Wargs formed after the commencement of the Company's rule by the cultivation of immemorial waste are called *hoságame* (new cultivation) wargs. The tenure of a *hoságamewargdar* is exactly the same as that of a *múlawargdar*, except that the privileges and easements over jungle and pasture land attached to *múla wargs* have not been conceded to *hoságame wargs* created since fasli 1276.

Wargs which pay the full 'tharáo' assessment are called 'bharti' and others 'kambharti,' and these latter are sub-divided into Board *sipháras*, *vaide* and *taniki* as explained in an earlier part of the chapter. All *kambharti wargs* except the 'Board sipháras' are brought before the Settlement-officer at the annual *jamabandi*, but only a few of them are now subjected to annual inspection and report, those with regard to which this inspection has been dispensed with being known as '*taukuf*' or '*kaiam kammi*.' There is nothing to prevent a Settlement-officer altering the assessment on a '*taukuf*' or '*kaiam kammi*' warg, but it is not usual to do so.

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110 Extracts from Minutes of Consultations, dated 11th April 1853.
111 Board's Proceedings, dated 16th April 1859, No. 1350.
112 Do. dated 7th May 1868, No. 3349.

Kudutaledars.

The *warg* is the unit of assessment. Prior to 1819, parties buying and selling portions of *wargs* were allowed to apportion the assessment as best suited their own convenience, but as this was found to be one of the causes of inequality of assessment, the Government declared in that year [113] that unauthorized sub-divisions of the revenue payable from an estate to correspond with sub-divisions of the estate itself are not binding on the Government, but that the whole estate continues answerable for the whole revenue with which it is assessed.[114] Subject to this rule sub-divisions now go on freely with an apportionment of the assessment at the pleasure of the parties which is so far recognized that the shares of the assessment payable by the different 'kudutaledars,'[115] as payers of assessment are styled, are entered in the village accounts and a register of transfers of 'kudutales' is kept in the taluks. A *kudutaledar* in South Canara is in exactly the same position as a *pattadar* or joint *pattadar*, as the case may be, in other districts of the Presidency, and if he holds only a portion of a *warg* he is liable, when called on, to pay up on account of a default on the part of the holder of another portion. In practice this but rarely happens, and when it does, the matter is settled by a rough survey or valuation of the *warg* and an authorized sub-division and apportionment of assessment, the ordinary establishment being sufficiently strong to do this, though it could not undertake to apportion the assessment in every case of sale or transfer. When a portion of a *warg* is sold for arrears, it is divided off and numbered as a new *warg*, being entered as *múli* or *géni* according to the designation of the original.

Dhurmati and sarásari chittas.

As again and again stated in the earlier part of this chapter, there are absolutely no records of the boundaries or extent of the different *wargs*. At the commencement of the British administration an account usually known as the 'dhurmati' chitta from the name of the year 1801, in which the majority [116] of them were drawn, was prepared by the village officers for each *warg* showing the *bijwari* or amount of seed required to sow it, the assessment due thereon and the rent produce (*hutwali*) [117] with occasionally other particulars at the discretion or fancy of the officer who prepared the account. The entries in these accounts

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[113] Minutes of Consultations, 31st May 1819.

[114] Board's Proceedings, dated 16th November 1843, para. 35.

[115] Probably derived from *kodu*, to give, and *tale*, a head.

[116] The chittas for the Coondapoor taluk were prepared in Dundubhi (1802). Those for the máganés made over from Coorg in Angirasa (1812) and those for the rest of the district in Dhurmati (1801).

[117] Rivaz hutwali = normal rent produce when an estate is in full bearing Hazir hutwali = actual rent produce at time of preparation of account.

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are notoriously inaccurate, but, such as they are, they are all we have. When the *tharáo* assessment was introduced a new *chitta* was prepared from the old one called the 'sarásari' *chitta*. The *sarásari chitta* for each estate has been kept up to date and all changes of assessment have been entered in it with notes of any surveys or valuations or inspections which may from time to time have been made.

Assessment on wargs.

From what has been stated in the sketch of the revenue history of the district given above, it will be seen that no estimate of any practical value can be made of the average assessment on the different classes of land forming portions of old *wargs*, but in assessing encroachments or additions to old *wargs* and in granting land for 'hoságame' *wargs* the different fields are classified as follows:

(1) *Bail.*—Low-lying land of good quality with an abundant water-supply capable of producing annually three crops of rice, or two crops of rice and one of some other grain or pulse, or two crops of rice, both of which can be raised without recourse to artificial means of irrigation.

(2) *Majal.*—Land capable of producing annually two crops of rice, or one of rice and one of other grain.

(3) *Bett.*—Land capable of producing one crop of rice annually.

(4) *Bagayet.*—Land specially adapted for cocoanut or areca-nut gardens.

The rates adopted for the above classes of land are—

		RS.
Bail ...	first sort	6
	second sort	4
Majal ...	first sort	4
	second sort	3
Bett ...	first sort	2
	second sort	1
Bagayet.	first sort	12
	second sort	8

In the Collector's letter on which these rates were formally sanctioned by the Board of Revenue,[118] the different rates for each class are shown as for the coast and the interior, respectively, but the distinction is not adhered to in practice. Cocoanut and occasionally areca-nut trees are grown on all classes of land, but the *bagayet* or garden assessment is applied only when the land is specially adapted by nature for that kind of cultivation, gardens

[118] Board's Proceedings, dated 14th August 1863, No. 5087.

on other lands being assessed at the appropriate rice-land rates. There are but few assessed waste lands in this district, except in localities in which they are not now much sought after, and consequently the majority of *darkhásts* are for unassessed waste, and are dealt with as far as possible under the same rules as are in force for applications for assessed waste in other districts. In addition to the preferential claims allowed elsewhere, a preference is usually shown here to a claimant within whose 'kumaki' the land lies, or whose water-supply is drawn from it, or who is shown to have enjoyed exclusive rights to pasture, &c., over it, under the recognised custom of the village. Where no such preferential claim is proved, the land is sold by auction subject to assessment.

Assessment on wargs.

The old *wargdárs* of a village are much addicted to claiming grazing rights over the entire waste of the village and pleading that the cultivation of their lands must fall off if the waste available for pasture is restricted or reduced. At times much attention has been given to their pleas and many applications refused, but as population increases people are becoming clamorous to obtain land on payment of an assessment of at least one rupee per acre, and, as land broken up for cultivation, or properly enclosed and treated as pasture, is more profitable to the community at large than uncared for village waste, the Board of Revenue in their Proceedings, dated 18th December 1883, No. 3815, have authorized the unrestricted grant of land on darkhast at the discretion of the Collector.

Kumari.

The most important of the other assessments on land is that on 'kumari,' a method of cultivation by felling and burning a patch of forest and raising on the ground manured with the ashes a crop of rice, or dry grain mixed with cotton, castor-oil seed, &c. Fuller details regarding the cultivation will be found under 'Agriculture.' Here it is only necessary to say that, for the purposes of assessment, there were originally two classes of *kumari*—'warg' and 'sirkár.' In the case of the former the assessment was collected along with the other assessment on the *warg* and the *kumari* cultivators dealt only with the 'wargdár.' In the case of 'sirkár' *kumari*, the assessment was paid direct to Government and the cultivators were usually a migratory class.

As soon as more correct ideas regarding the value of forests began to gain ground, attention was attracted to the peculiarly destructive and wasteful nature of this kind of cultivation and the question was exhaustively examined with the result that the Government accepted the conclusion arrived at by the Board of Revenue that the entry of 'kumari shist' in the *patta* on account of an estate or warg gave no validity to a claim to proprietary

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rights over forests.[119] *Wargdár kumari* was therefore abolished[120] and the assessment on account of it remitted throughout the district, except in the five southern máganés of the Kásaragód taluk,[121] and Sirkar 'kumari' was prohibited without previous permission, which permission it was directed should be given sparingly, and never for spots in the timber forests.[122] It is now allowed only in a part of the Coondapoor taluk, and within 'kumaki' limits in the máganés near the ghauts in the Uppinangadi taluk, assessment being charged at the rate of Re. 1 per acre on the area cut.

As *kumari* cultivation in the southern máganés was carried on as a regular part of their farming by the resident landholders, it was thought it would be harsh to abolish it there,[123] and its continuance was sanctioned under certain restrictions subject to an assessment of Re. 1 on every acre cut with permission, and Rs. 8 on every acre cut in excess of that for which a permit was granted. The system of permits and annual measurement was found to work unsatisfactorily as well as to afford much room for fraud and corruption, and in 1883 instructions were issued for the introduction of a compounded assessment not exceeding seven times the old *warg kumari* assessment.[124] This compounded assessment was introduced at the next annual settlement, seven times the old assessment being adopted as a general rule, and a lower amount taken only when it was found that the annual payment for a series of years had fallen materially short of that amount.

Nela-terige and ghar-terige.

There is no free village-site in Canara as cultivators reside on their lands or in the immediate neighbourhood. Free sites are allowed on the 'kumaki' or waste land immediately adjoining cultivation for houses for the *wargdárs* or their tenants, but assessment is charged if others are allowed to build thereon, and in the case of sites in bazaars, or streets in large villages, or towns, special rates of Rs. 6 and Rs. 12 are charged under the name of 'nela-terige' or ground-tax. The 'nela-terige' is credited to Land Revenue, Miscellaneous, as the payer is supposed to acquire no proprietary right in the site, thus differing from the old 'gharterige,' the payer of which is supposed to hold on the same terms as an ordinary *wargdár*. Practically there is no difference between them, but *ghar-terige* holdings date from the advent of the British and no distinction was made between them and ordinary *múli wargs* when the first accounts were drawn up.

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119 G.O., dated 23rd May 1860, No. 830, Revenue Department, para. 8.
120 *Ibid.*, para. 16.
121 *Ibid.*, para. 17.
122 *Ibid.*, para. 19.
123 *Ibid.*, para. 17.
124 G.O., dated 29th August 1883, No. 1054, Revenue Department.

Hakkal.

The lowest rate on which land is given out on patta is Re. 1 per acre, but a limited amount of dry cultivation is carried on by the villagers on the hill sides and plain wastes under the name of 'hakkal.' When this cultivation is within 'kumaki' limits, that is within the 100 yards from *warg* land on which the *wargdár* has an easement, no assessment is charged, but for *hakkal* cultivation on the ordinary village waste an assessment of eight annas per acre is annually fixed and charged. In parts of the Mangalore taluk the charge is thirteen annas and four pies. *Hakkal* cultivation was everywhere free until fasli 1260 and even now no charge is levied on any *hakkal* cultivation in the Amara and Sullia máganés which once belonged to Coorg.

Waste lands.

In the early days of the British administration of Canara, it was held by the Board of Revenue, as well as by Sir Thomas Munro, that, except in the case of unclaimed waste and escheated estates, the Government had never pretended to any proprietary right,[125] and all the earlier administrators treated a large portion of the waste and forest lands as the private property of the wargdars.[126] This view became modified as time went on. In 1839, Mr. E. Maltby wrote that the extent of the Government right in the jungle and waste had never been very clearly defined, and extensive tracts had been gradually included by persons whose right was extremely doubtful, the just claim to the right of pasturage or of gathering leaves for manure preferred by the holders of the neighbouring estates to the exclusion of other villagers having been changed to a claim of proprietary right in the soil, and many secret encroachments made upon waste to which the parties had no title whatever.[127]

Mr. Blane went very fully into the subject in his report of the 20th September 1848, and the following extracts from his letter sufficiently show not only the views taken by him, but those which have been more or less consistently acted upon, or even exceeded in the direction of asserting Government rights, by all Collectors who have succeeded Mr. Blane:

"37. The theory at present asserted by the landholders of "Canara and which has been practically acted upon at least since "the tharao settlement is this. That their estates include not only "the land which was in cultivation at the time the former settle-"ments were made, but also tracts of waste of two descriptions. "First the waste lands which had fallen out of cultivation in former "times, and, second, immemorial waste lands which never were in

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[125] Indian Law Reports, Bombay Series, vol. iii. p. 587.
[126] Board's Proceedings, dated 21st March 1811, No. 1222, paras. 10 and 18 to 22.
[127] Mr. E. Maltby's letter, dated 22nd July 1839, para. 9.

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"cultivation, both of which kinds of waste they allege that they "have a right to bring under cultivation without any additional "assessment. They assert that the beriz was fixed upon the entire "estate, including lands of every description. Of these waste "lands, as I have before stated, but cannot too often repeat, there "is no account or record whatever, and even of the cultivated "lands as they originally stood at the commencement of the Com-"pany's Government, the only record which exists, and that in "but some of the taluks, is an account called the dhurmuti chitta, "being a bijawari statement furnished by the shanbogues in the "second year of the Company's Government of the lands then "actually under cultivation, but which is said to be only an "estimate, and is not admitted as a correct or authentic record, or "one which can be used practically as a check in all cases.

"38. With respect to the cultivable waste, assuming that it "orginally formed part of the warg or holding to which it is now "claimed as belonging, and that no additions have been made to "it from the lapsed estates or Sirkar waste lands, it seems necessary "to consider how a permanent settlement such as the tharao, made "upon the average collections of former years, would affect the "public revenue. The original assessment or demand on the estate "may be assumed to be or ought to represent, the Government "share of the produce of those lands when under cultivation, but "it has been that very large remissions were made, and continue "to be to the present day on account of waste portions of estates, "which remissions, where the assessment was fixed solely with "reference to the *collections,* would be excluded from the average, "and the rent would be *permanently* reduced by the amount of "*temporary* reductions. No provision was made at the tharao "settlement for re-imposing this assessment when the lands were "again cultivated, nor was the waste land separated from the "estate. It continued to be attached to it, and when again "brought under cultivation may be said to be enjoyed free of all "rent.

"39. In the instructions of the Board for carrying out the "tharao settlement, I find reference made to a question from the "Collector as to 'when the assessment on concealed lands belong-"'ing to private estates should become payable,' and the reply of "the Board that it should commence from the date of the detection "of the fraudulent concealment; but as it does not appear whether "this referred to the additions made to the cultivation within the "limits claimed for the estate, or what was to be considered con-"cealed land, or the means of distinguishing it, no inference can "be drawn from this order.

"40. Upon the whole, I am inclined to the belief that it was "the intention, in fixing the tharao beriz, that no account should

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"be taken of increased cultivation within the limits of the estates, "and to give the ryots the full benefit of all the lands they might "so bring under cultivation, but that it was under the impression "that these lands bore some kind of adequate assessment, and that "neither the extent of such lands, nor the importance generally of "the question, were at the time sufficiently considered or under-"stood.

"41. With respect to the other class of waste lands claimed as "being attached to estates to which I have referred, viz., the imme-"morial waste, they may be considered to form a distinct question "from that of the waste lands just referred to. It is to the claim "to these lands which has been incautiously admitted, or at least "not opposed, that I attribute the absorption of nearly all the "rekahnust or Government waste land. The claim appears to have "recently attracted the notice of Government, for it is apparently "respecting these that it called for some information in its "Minutes of Consultation, dated 5th August 1845. There are "considerable tracts of such kinds of waste land attached to a great "part of the estates, some of which is cultivable and some consisting "of hilly or stony ground incapable of improvement. They are "often termed 'kumaki' lands, or land allowed to assist in the "cultivation, and they were intended to afford to the ryots the "means of procuring leaves from the brushwood or jungles grow-"ing on them as manure for their fields, and to furnish grass as "fodder for their cattle; but they do not appear originally to have "differed materially from the waste lands used for similar purposes "in other parts of the country, except that, in place of being common "to the whole village, they were divided and enjoyed in separate "portions by the individual landholders. The original terms upon "which they were held then I conceive to have been essentially as "an adjunct to, and in connection with, the cultivated lands, and "the right to them to have been a modified right, and only to be "enjoyed for the purposes for which they were held as above stated. "The usufruct of them for such purposes was a necessary concession, "but I do not conceive them to have been on that account the "less Government lands, but only lands which they were permitted "to occupy for particular purposes.

"42. If such were in general terms the nature of the tenure "under which they were held, it has become entirely altered under "our administration. The ryots now claim the absolute proprietary "right in them the same as to their cultivated lands, and, as a "necessary consequence of such a right, the liberty to bring them "under cultivation without the payment of additional assessment, "and even of selling or letting them, and thus separating them, if "they choose, from the cultivation, and alienating them from the

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"original purposes for which they were intended. Another effect "of such a tenure is, they can prevent others from taking them up "on a patta and upon a fixed assessment payable to Government, "and the person occupying them pays the rent to the landlord, not "to the Government, and is in every respect his tenant. It is "necessary to observe, however, that the right to cultivate such "lands is not admitted in theory, but it is, as a general rule, "actually enjoyed in practice, from the simple cause to which I "have so often alluded that we do not know the extent of the "original estates, and cannot tell, therefore, what is new cultivation "and what is old, and the ready answer to all questions on the "subject is that it is part of the original cultivation. I have, "since I have held the office of Collector, endeavoured to set my "face steadily against the admission of such claims; but lands "which have been formerly brought under cultivation in this "manner are beyond recovery, and it may be said generally that "nearly every case in which it is attempted to restrain these "encroachments involves a protracted contest, and nearly the cer-"tainty of having to defend a law suit if there be the most slender "grounds for disputing the award."

Proprietary right to waste

From the above extracts it will be seen that, as regards waste lands attached to estates, a proprietary right to the first class, those which had once been cultivated but had fallen out of cultivation (*warg banjar*), was held by Mr. Blane to be vested in the holder of the estate to which the lands belonged, while as regards lands which had never been cultivated he admitted nothing more than an easement. This is the view which has been held ever since; but as regards the latter class of waste lands, an exception must now be made in the case of such waste lands as are included within the limits of the 893 'múl-pattas' or formal title-deeds granted by the revenue officers prior to 1844, chiefly for deserted estates. The boundaries specified in the title-deeds frequently include a considerable extent of waste and forest land, and although the documents contain a clause indicating that it was supposed that they merely made over to the new holder the right vested in the former proprietor, the list of rights conferred is very exhaustive, and, in the course of his judgment in the Bombay Forest case, the Honourable Mr. Justice West discussed the terms of these *múl-pattas* at considerable length and recorded his opinion that "there "can be no doubt that they were intended to convey a complete "ownership subject to assessment."[128] This decision has been accepted by the Madras Government.[129]

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[128] Indian Law Reports, Bombay Series, vol. iii, p. 554.

[129] G.O., dated 7th December 1881, No. 1889, Revenue Department.

Easements over waste lands.

The waste lands which had never been cultivated but were attached to wastes as aids to cultivation are classed by Mr. Blane in the extract given above as 'kumaki' lands, but this term has now got a much more restricted meaning as will be explained further on.

Nettikatts.

The most extensive claims to easements over waste and forest lands are those known as 'nettikatt' claims. The district having to provide for the drainage of from 130 to 200 inches of rainfall is necessarily, throughout the greater part of its area, made up of a succession of hills and valleys, the low lands being under rice or garden cultivation, for which the leaves and twigs from the woods and forests clothing the slopes have always been very freely used as manure, while the cattle were grazed on the open grass lands, and this woodland was not in the time of Mr. Blane, as explained by him, common to the village, but enjoyed in separate portions by the individual landholders. The crest of the hill dividing the valleys formed the natural boundary of the holdings of the cultivators on each side of a ridge, and wherever the natural conditions permitted of it, this 'nettikatt' or crest of the hill was very generally adopted as the boundary of estates in *múl-pattas*, grants from native princes, and old private and public documents of all kinds. As above shown, Messrs. Maltby and Blane questioned the correctness of the view that the forest and waste land attached to estates was held on proprietary right, and the opinions thus put forward by these gentlemen have been acted on, and indeed exceeded in the direction of the assertion of the rights of Government, by the later Collectors, by the Board and by Government. Land within *nettikatt* limits is now treated as in no way attached to any *warg* and the full 'kumaki' privileges are limited to a distance of 100 yards from *warg* land, the cultivators of each valley being allowed in addition the common usufruct of the open hill sides up to the water-shed dividing each valley.[180] In some parts of the district, and notably on the coast, the configuration does not admit of claims to easement being based on the 'nettikatt' rule, but there are always some jungles, coppices, and pasture lands, to which similar claims are put forward, and over which similar privileges are exercised.

Kumaki.

In 1823, the then Collector of Canara, Mr. Harris, called for a list of Government forests and directed at the same time that to estates which had no forest land attached to them, 100 yards should be assigned as 'kumaki' from the Government forests adjoining them. As the opinion gained ground that all waste land was really the property of Government, the term 'kumaki' came to

180 Board's Proceedings, dated 30th January 1865, No. 490, paras 3 and 4.

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be applied generally to the waste situated within 100 yards of cultivated land, and this view was formally embodied in rule 8 of the Forest Rules of 1864, which ran as follows: "*Kumaki* land "is limited to 100 yards from the cultivated land to which it has "been attached." This limitation is maintained in the revised Forest rules of 1884. *Kumaki* land is not usually given on *darkhást* for cultivation except to the owner of the adjoining land, but the Government reserve their right to do so, and in disposing of applications for land forming 'kumaki' to a *warg*, the revenue officers of the district are guided by Board's Proceedings, dated 13th August 1863, No. 5063, paragraph 2 of which is as follows:

"As a rule, such applications should not be admitted, and "under any circumstances the *wargdar* of the adjoining land is "to have the preferential right of occupancy on assessment and "of thus including the land in his *warg*.

"It should by no means be considered a matter of course "that if the *wargdar* refuses to take the land on assessment, the "*darkhastdár* will obtain it, but at the same time it cannot be "permitted that land of good quality should be kept out of "cultivation to afford manure and pasture for the adjoining land "*in every case* in which a *wargdar* refuses to pay for land which "is sought by another applicant."

In the Amara and Sulia máganés which were attached to Coorg until 1834, the place of 'kumaki' lands is taken by 'bánes' —pieces of waste land or jungle assigned in the settlement of 1812 to each landholder for the provision of pasture, fuel and timber. They do not in all cases immediately adjoin the cultivated land on account of which they are enjoyed.

Sub-tenures.

The two commonest classes of tenants under *wargdars* in Canara are the *múlgénigars* or permanent tenants and the *chálgénigars* or tenants-at-will.

Múlgéni.

The *múlgéni* or permanent lease is of very old standing in Canara and is described as follows in the Proceedings of the Board of Revenue, dated 5th January 1818:

"The *múlgénigars* or permanent tenants of Canara were a class "of people unknown to Malabar who on condition of the payment "of a specified invariable rent to the *múli* or landlord and his suc-"cessors, obtained from him a perpetual grant of a certain portion "of land to be held by them and their heirs for ever. This right "could not be sold by the *múlgénigar* or his heirs, but it might be "mortgaged by them and so long as the stipulated rent continued "to be duly paid, he and his descendants inherited this land like "any other part of their hereditary property. The landlord and his "heirs were precluded from raising the rent of the permanent lessee. "It was, therefore, originally either higher than that procurable

"from temporary tenants, or it was fixed at the same or at a lower "rate in consideration of a certain sum being paid as premium or "purchase-money for the grant in perpetuity, or as a favour conferred by the landlord on some of his dependents. It amounted "in fact to a permanent alienation of a certain portion of land by "the landlord, for it never again lapsed to him or his descendants "except on the failure of heirs to the permanent lessee. This class "of people may, therefore, be considered subordinate landlords "rather than tenants, especially as, though many of them cultivated "their lands by hired laborers or slaves, others sub-rented them "to *chálgénigars* or temporary tenants."

Múlgéni.

The *múlgéni* of the present day differs but little from that above described. In some cases sale is allowed as well as mortgage, but in others, and probably in the majority of *múlgéni* leases now executed, the lessee's powers of alienation are much restricted, and forfeiture of the lease is provided for non-payment of rent, for waste, or for unauthorized alienation. As a set-off against the forfeiture for alienation, it is provided that, if the lessee desires to give up the land, he shall do so to the lessor, receiving from him the value of any improvements that may have been made. In some cases a premium is paid in addition to the rent reserved.

Chálgéni.

The *chálgéni* tenants, though nominally mere tenants-at-will, used often to go on holding their lands from father to son at a rent paid in kind or money or both and determined by the custom of the country and without any written agreement. Written agreements executed from year to year are, however, becoming more generally the rule owing to a variety of causes, one of the most potent being the provision in section 13 of the Rent Recovery Act VIII of 1865 that a landholder shall not be at liberty to proceed under the Act against his tenant unless he has a written agreement with him.

Vaide-geni.

Midway between the *múlgéni* and the *chálgéni* is the *vaide-géni* or lease for a specified term of years.

Both with the *múlgéni* and *vaide-géni* leases it is not infrequent to have a progressive rate of rent. This is especially common when the lease is for land which it is proposed to plant up as a cocoanut garden, and the tenure is then called 'nadagi' in the northern part of the district and *kuikánam* in the south.

Mortgages.

Mortgage of land with possession is known as 'árvar,' 'illadárvar' or 'bhógyádi aduvu,' and simple mortgage as 'aduvu.'

Mortgage with possession may be for a fixed, or for an indefinite period, the mortgagee paying the Government assessment and appropriating the rent or produce as interest on the money

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Mortgages.

advanced. When the produce of the land mortgaged is held in the agreement to be more than sufficient for this, the surplus is either paid over to the mortgagor or applied to the reduction of the mortgage debt. Provision is made for the recovery at the time of redemption of the value of any improvements which the mortgagee may have made to the land, and in some cases it is stipulated that, in default of redemption within a specified time, all right of redemption shall lapse, and the land becomes the absolute property of the mortgagee. When this stipulation is introduced, the mortgage differs but little from what is known as the conditional deed of sale or *yediru-nudi krayachit* under which a vendor reserves to himself the right of redemption of the land sold within a specified date.

Ináms.

In the district of South Canara there are no *ináms* in the sense of land held free of assessment. The *inám* is merely the assignment of the assessment due to Government and though an assignee may happen to be also the occupier of the land of which the assessment has been assigned, his rights as such are entirely independent of his position as *inámdar*. In the time of the Hindu dynasties, a large amount of the revenue of the land was thus assigned to religious institutions as well as to individuals. During the Muhammadan period orders were issued for the resumption of these, but the orders were only partially carried into effect, and in the early period of the British administration the policy of resumption was abandoned. In lieu, however, of assignments of revenue to institutions direct, cash payments known as 'tasdiks' were made from the treasury as a more convenient arrangement, the system of assignments from revenue (*kistbandi* deductions) being continued as regards individuals only.[131]

The two classes of ináms were then known as 'pagoda and mosque allowances' and 'jári brahmádaya ináms.'

In pursuance of the policy which led to the passing of Act XX of 1863 (An Act to enable the Government to divest itself of the management of religious endowments), the plan of making cash payments to religious institutions was again abandoned and assignments made with regular title-deeds issued by the Inam Commissioner. The 'jári brahmádáya ináms' were also carefully examined, and assignments with title-deeds were granted in all cases in which the *ináms* were of a religious nature, while all others were converted into cash payments under the audit of the Accountant-General.

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[131] G.O., dated 29th October 1877, No. 3171. Letter from Mr. Blane to Board of Revenue dated 18th September 1846, No. 81.

Inâms.

The system of assignment of land revenue was not found to work altogether satisfactorily. Assignees on the one hand often found it difficult to collect the assessment, and *wargdárs* on the other hand were dissatisfied with a position which might eventually lead to their being regarded as tenants of the assignees. The Government accordingly sanctioned the substitution, where desired, of a system called 'bériz deduction' under which the revenue is collected by the village officers and paid over by them to the inámdárs, the amount thus paid being shown in the accounts as a remission.

As the acceptance of the 'bériz deduction' system involves the loss of an allowance of ten per cent. on account of cost of collection and vicissitudes of season, a certain proportion of the inámdárs have preferred to adhere to the arrangement under which they themselves collect the revenue assigned.

CHAPTER IV.

THE PEOPLE.

Introductory—Languages—Religions—Demonolatry—Devil-dancing—Mári-amma—Serpent worship—Customs—Castes—Brahmins—Tulu Brahmins—Shivalli Brahmins—Kótéshwar Brahmins—Havíka or Haiga Brahmins—Kóta Brahmins—Sakläpuri Brahmins—Kandávara Brahmins—Déshasht Brahmins—Karádi Brahmins—Chitpávan Brahmins—Pádia Brahmins—Gauda Brahmins—Konkani Brahmins—Sárasvat Brahmins—Stánikas—Dévadigas—Moyilis—Sappaligs—Traders—Rájápuris—Vánis—Husbandmen—Bants—Gaudas—Malavas—Maráthis—Áres—Sérvégaras—Vakkaligas—Heggades—Kurumbas—Artisans—Akkasále—Sonár—Cheptégára—Charódi—Gudigára—Kanchugára—Weavers—Dévángas and Jádas—Sáles—Pataégárs—Bilimaggas—Gánigas—Kumbáras—Fishermen—Khárvis—Mogérs—Mukkuvans—Washermen Agasas—Madivälas—Kelasi or Kshauraka—Hajáms—Billavas—Halepaik—Tiyyans—Holeyas—Bákudas—Sámagáras—Male-Kudiyas—Koragas—Kudubis—Nalkís—Pambadas—Pánáns—Paravas—Belleras—Miscellaneous classes—Máppillas—Other Muhammadans—Christians—Roman Catholics—Protestants—Jains.

CHAP. IV. INTRODUCTORY.

Religion, language and customs all point to the people of South Canara being a Dravidian race, the admixture of Aryan blood being but small even amongst the Brahmins, with the exception, perhaps, of those who are comparatively recent immigrants. Brahmin chronicles tell of early Brahmins introduced by Parasu Ráma and afterwards driven out or degraded, but nothing definite is known of any time earlier than the middle of the eighth century when Brahmins were introduced under the auspices of Máyúr Varma, a king of the Kadamba dynasty, ruling at Banavási in North Canara. Brahmin accounts tell of the Kadamba armies being opposed by Mogérs (fishermen), Holeyas or Pariahs, and Koragas; but before the Brahmin ascendency there were no castes, and, for many reasons, amongst which may be specified the tradition of a matrimonial alliance said to have been entered into between one of the Kadamba invading chiefs and the family of Habáshika, who is described as king of the Holeyas and Koragas, there is little room for doubt that the invaded and the invader were both of the same race. Brahmin chronicles either ignore the Jains, or mention them casually as of little account, but the early Kadambas of Banavási were undoubtedly Jains, and, as all we know of the Jain chiefs of Canara in historical times

is a record of gradual decadence, it would seem that when the Brahmins came to Canara Jainism was what may be called the fashionable religion, professed by the chiefs and leading Bant landowners, and forming a veneer over the early Dravidian worship, very similar to the Hinduism of the corresponding classes at the present day. The Brahmins seem at once to have acquired a great ascendency over the people, and to have secured some of the finest lands, which their descendants hold to this day, and form nine per cent. of the whole population, the percentages in the Telugu country being only 3·7, while in the Tamil districts it is not more than 2·6. As Brahmin influence extended, social and religious class distinctions hardened into castes, the field labourers or Holeyas being hardly recognized as Hindus at all. From the earliest times there seem to have been local chiefs exercising authority in Tuluva and usually fighting against one another, when not combining to resist the early Canarese kings in their efforts to establish a suzerainty over them, and the existence of this state of things amongst a primitive people of polyandrous habits seems to have led to all property in land being vested in the women, under which arrangement those members of landed families who remained at home to look after the land, had no opportunities of acquiring special rights of ownership to the disadvantage of the absent military classes. It is not known how far in early times the women actually managed the family property, but they do so to some extent even now. Dignities and titles however seem always to have gone to the son of the sister of the deceased holder, and the same rule is followed when the management of the property is exercised by the males, as is now usually the case; hence the rule of inheritance is known as 'Aliya Santana' or 'sister's son lineage' as will be more fully explained hereafter. It is followed by all the old Tulu land-owning, cultivating and labourer castes as well as by the Moplahs, who are the descendants of Arab settlers who formed connections with Tulu women of the land-owning classes and adopted the prevailing rule of inheritance. The Moplahs now form about nine per cent. of the total population, their numbers however having been swelled by the name Moplah being adopted by local converts to Muhammadanism. The Christian element in the population is of much later date than the others, but they are a prosperous body and now form nearly seven per cent. of the whole. The Jains have been diminishing for centuries, and now number less than one per cent. of the people. Much of the decrease has, no doubt, been due to the substitution of Hinduism instead of Jainism as an adjunct to their primitive Dravidian faith, and a reversion to the name of Bant.

CHAP. IV. LANGUAGE.

Although Canarese is the official language of the district and spoken by all the educated classes, Tulu, or the language of the ancient 'Tuluva,' is still spoken by nearly one-half of the population, and it is probable that it was the common tongue throughout the district to the north of the Malayálam country, until it was displaced by Canarese in those tracts north of Barkúr, in which the people were for many years ruled directly by Governors appointed by the Canarese dynasties above the ghauts without the intervention of the local Tulu Jain chiefs who, further south, succeeded in retaining their position as underlords until the time of Hyder and Tippu. The sacred books of the Havík Brahmins of the Coondapoor taluk being written in Tulu indicates that it was still the language of that locality when the Brahmins arrived in the eighth century A.D. Tulu is described by Dr. Caldwell as one of the most highly developed languages of the Dravidian family, but there is no Tulu literature or separate Tulu character, and though Tulu inscriptions are to be found here and there in other districts of the Presidency, the spoken language is now practically confined to South Canara, where it shows no signs of dying out. The educated classes throughout the district can all speak Canarese, though it is not always their home-tongue, and it is the language of the common people of all castes and classes in the Coondapoor taluk and the northern part of Udipi. It is also spoken by many of the Gaudas and other cultivators in the interior near the ghauts, especially in the Uppinangadi taluk, where the cultivating classes are closely allied with those in Mysore above the ghauts. Malayálam is spoken in the Kásaragód taluk to the south of the Chandragiri river and by numbers of Malayáli people, chiefly Moplahs, who have moved still further north. Konkani, a dialect of Maráthi, is the parent tongue of numerous immigrant classes forming upwards of ten per cent. of the population, the most important being the Sárasvat and Konkani Brahmins and the Roman Catholic Christians. The Christians in the rural tracts however, have, in many cases, now adopted Tulu or Canarese as their home speech. Hindustani is spoken by the Musalmans other than Moplahs, chiefly in the towns on the coast.

Some have thought that the Koragas were an aboriginal people with a separate language of their own, but the language appears to be only a dialect of Tulu, and there is otherwise good reason for believing that the Koragas are only a sub-division of the ordinary Tulu Holeya or Pariah. A vocabulary of the Koraga dialect will be found in the second volume.

RELIGIONS.

According to ordinary classification the whole population of South Canara is divided into Hindus, Musalmans, Christians and Jains, the proportions being as follows :

CHAP. IV. RELIGIONS.

Hindus	81·68
Musalmans	10·60
Christians	6·75
Jains	0·97
Total ...	100·00

Musalmans are most common in the Kásaragód and Mangalore taluks, about half of the whole being in the former taluk and three-fifths of the remainder in Mangalore. They are mainly Moplahs or Máppillas, descendants of Arab settlers, who married women of the country, but their ranks have also been largely swelled by converts. Christians are most numerous in Mangalore and Udipi. Jains are now-a-days but a small community residing mainly at Mudbidri and Kárakal, the capitals of the most powerful of the old Jain chiefs.

Demonolatry.

Of the Hindus rather over ten per cent. are Brahmins, and all the others, though nominally Hindus, are really worshippers or propitiators of tutelary deities and 'Bhútas' or demons, usually the spirits of deceased persons. This they share with the Dravidian population of South India generally, but it is most marked in the west coast districts, which have been freer from outside disturbing influences than the rest of the peninsula.

Every village in Canara has its Bhútasthánam or demon temple, in which the officiating priest or *pújári* is usually a man of the Billava cáste, and shrines innumerable are scattered throughout the length and breadth of the land for the propitiation of the malevolent spirits of deceased celebrities, who, in their life-time, had acquired a more than usual local reputation whether for good or evil, or had met with a sudden or violent death. In addition to these there are demons of the jungle, and demons of the waste, demons who guard the village boundaries, and demons whose only apparent vocation is that of playing tricks, such as throwing stones on houses and causing mischief generally. The demons who guard the village boundaries seem to be the only ones who are credited with even indirectly exercising a useful function. The others merely inspire terror by causing sickness and misfortune, and have to be propitiated by offerings which often involve the shedding of blood, that of a fowl being the most common. There are also family Bhútas and in every non-Brahmin house a room, or sometimes only a corner is set apart for the Bhúta and called the Bhúta-kotya.

The Bhútasthánam is generally a small, plain structure, 4 or 5 yards deep, by 2 or 3 wide, with a door at one end covered by a portico supported on two pillars. The roof is of thatch

CHAP. IV. RELIGIONS. Demonolatry.

and the building is without windows. In front of it there are usually three or four T-shaped pillars, the use of which is not clear. The temples of the more popular Bhútas, however, are often substantial buildings of considerable size. Inside the Bhútasthánam there is usually a number of images, roughly made in brass, in human shape, or resembling animals, such as pigs, tigers, fowls, &c. These are brought out and worshipped as symbols of the Bhútas on various ceremonial occasions.[1] A peculiar small goglet or vase, made of bell-metal, into which from time to time, water is poured, is kept before the Bhútas, and on special occasions *kepula* flowers (*Ixora coccinea*) and lights are placed before them. In the larger *sthánas* a sword is always kept near the Bhúta, to be held by the officiating priest when he stands possessed and trembling with excitement before the people assembled for worship.[2] A bell or gong is also found in all Bhútasthánams. In the case of Bhútas connected with temples there is a place set apart for them, called a *gudi*. The Bhútasthánam of the Baiderlu is called a *garudi*.

The names of the Bhútas are legion. One of the most dreaded is named 'Kálkuti.' Two others commonly worshipped by the Bants and the Billavas are Kóti Baidya and Chennaya Baidya, who have always Billava 'pújáris.' These two Bhútas are the departed spirits of two Billava heroes. The spirit of Kujumba Kánje, a Bant of renown, belongs to this class of Bhútas. Amongst the most well known of the others may be mentioned Kodamanitáya and Mundaltáya, and the jungle demons Hakkerlu and Brahmérlu. The Holeyas worship a Bhúta of their own, who is not recognized by any other class of the people. He goes by the name of Kumberlu, and the place where he is said to reside is called Kumberlu-kotya.[3]

Very often a stone of any shape or a small plank is placed on the ground or fixed in a wall and the name of a Bhúta given to it. Other representations of Bhútas are in the shape of an ox (Mahísandáya), a horse (Járándáya), a pig (Pañjurli), or a giant (Baiderlu).

Devil-dancing.

The Bhúta worship of South Canara is of four kinds, viz., *kola*, *bandi*, *néma* and *agelu-tambila*. Kola or devil-dancing is offered to the Bhútas in the *sthána* of the village in which they are supposed to reside. The Sudras of the village, and of those adjacent to it, assemble near the *sthána* and witness the kola ceremony in public, sharing the cost of it by subscriptions raised among all the Sudra families in the village in which the ceremony is held. Bandi is

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[1] Mr. M. J. Walhouse, in *Journal of the Anthropological Institute*, vol. v. p. 412.

[2] *Indian Antiquary*, vol. xxiii. p. 5.

[3] *Indian Antiquary*, vol. xxiii. p. 6.

Devil-dancing.

the same as koḷa with the addition of dragging about a clumsy kind of car, on which the Pombada priest representing the Bhúta is seated. Néma is a private ceremony in honour of the Bhútas, held in the house of any one who is so inclined. It is performed once in ten, fifteen or twenty years by well-to-do Billavas or Bants. The expenses of the néma amount to about Rs. 600 or Rs. 700, and are borne by the master of the house in which the néma takes place. During the néma the Bhútas, *i.e.*, the things representing them, are brought from the sthána to the house of the man giving the feast, and remain there till it is over. Agelu-tambila is a kind of worship offered only to the Baiderlu, and that annually by the Billavas only. It will be seen that koḷa, bandi and néma are applicable to all the Bhútas including the Baiderlu, but that the agelu-tambila is applicable only to the Baiderlu.

Good accounts of a devil dance are given by Mr. Walhouse in the *Journal of the Anthropological Institute*, vol. v. and a detailed description by the late Dr. Burnell was published by Major Temple in the *Indian Antiquary* for January and February 1894.[4] The performance always takes place at night, commencing about 9 o'clock. At first the pújári, with the Bhúta sword and bell in his hands, whirls round and round, imitating the supposed mien and gestures of the demon. But he does not aspire to full possession; that is reserved for a Pombada or a Nalke, a man of the lowest class, who comes forward when the Billava Pújári has exhibited himself for about half an hour. He is naked save for a waist band, his face is painted with ochre and he wears a sort of arch made of cocoanut leaves and a metal mask. After pacing up and down slowly for some time he gradually works himself up to a pitch of hysterical frenzy, while the tom-toms are beaten furiously and the spectators join in raising a long, monotonous howling cry, with a peculiar vibration. At length he stops and every one is addressed according to his rank; if the Pombada

[4] The following account of Canara devil-dancers and exorcists is given in Mr. Lavie's MSS. *History of Canara*: "It is their duty to carry a beautiful "sword with a handsomely carved handle and polished blade of the finest steel. "These they shake and flourish about in all directions jumping, dancing and trem- "bling in a most frightful manner. Their hair is loose and flowing, and by their "inflamed eyes and general appearance, I should suppose that they are prepared "for the occasion by intoxicating liquors or drugs. . . . . Their "power as exorcists is exercised on any person supposed to be possessed with "the devil. I have passed by a house in which an exorcist has been exercis- "ing his powers. He began with groans, sighs, and mutterings and broke forth "into low moanings. Afterwards he raised his voice and uttered with rapidity and "in a peculiar tone of voice certain mantrams or charms, all the while trembling "violently and moving his body backwards and forwards."

CHAP. IV. RELIGIONS. Devil-dancing.

offends a rich Bant by omitting any of his numerous titles, he is made to suffer for it. Matters regarding which there is any dispute are then submitted for the decision of the Bhúta, and his award is generally accepted. Either at this stage or earlier the demon is fed, rice and fruit being offered to the Pombada, while if the Bhúta is of low degree, flesh and arrack are also presented. These festivals last for several nights and Dr. Burnell states that the devil-dancer receives a fee of Rs. 8 for his frantic labours.

MÁRI-AMMA.

Mári-amma, the small-pox goddess of Southern India, is also greatly venerated in Canara, and a temple dedicated to her service is to be found in every important village, at which, in addition to minor offerings, the blood of goats and fowls and, on special occasions, that of buffaloes is freely offered, the victims in the case of the smaller animals being decapitated at a single blow.

SERPENT WORSHIP.

From its extreme prevalence, and the number of snake stones to be found throughout the district, one would almost imagine that serpent-worship was indigenous, but the best authorities can trace no connection between it and the ancient Dravidian beliefs, and the coincidence of an unusually extensive serpent-worship, side by side with undiminished attachment to primitive Dravidian rites and practices, is probably due to the fact that the Brahminism, which first influenced the people of South Canara, was itself unusually tainted with serpent-worship, being imported according to tradition from 'Ahi-Kshétra' or the land of snakes. The chief seat of serpent-worship in Southern India is the Brahmin temple of Subramanya in the Uppinangadi taluk, and it is the higher, or most Hinduized, classes that show the most veneration for snake stones, which have also most commonly been set up on platforms under the sacred peepul tree (*Ficus religiosa*). The usual object of serpent-worship is to procure fecundity, the most common offerings being flowers, ghee and milk, the latter being frequently actually drunk by a cobra, whose hole is near the shrine.

CUSTOMS.

The only distinctive custom of the Tulu people, which, however, they share with the inhabitants of other west coast districts farther south, is the Aliya Santana rule of inheritance,[5] which, as already

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[5] The following account of the Aliya Santana custom is found in the MS. left by Mr. Lavie, a former Judge of Canara:

On Friday the 3rd Magha of the year Eishvara being the first of the Salivahana Era of 78 A.D., Bhútal Pandia, the son of Veera Pandia and maternal nephew of Devoo Pandia, began to reign at Jayantica or Barkúr, and in the sixth year of his reign he abolished the custom of Makkal Santán, descent of the ancestral property from father to the son, and established the right of inheritance in the sister's children, that is to say, he introduced the Aliya Santana customs. He also altered several rules of caste and made fourteen new rules to the following effect:

explained, means that the property of a family is vested in the female line and descends from mother to daughter; but as titles and dignities are vested in the males, and the management of the property is also usually exercised by a brother, the line of descent is ordinarily takên to be from the deceased holder to his sister's son. There is nothing to show whether the practice of the property being managed by a male is of recent origin or not. Theoretically even now the eldest member of the eldest branch, whether male or female, is the 'Ejmán' or manager, but in practice the 'Ejmán' exercises his or her functions with the aid of such other members of the family as are found most competent to render the required assistance. Division of property cannot be enforced, and is in fact forbidden, but temporary arrangements for separate management are often made for convenience, and by lapse of time become practically permanent divisions in many cases. Of course this rule of inheritance and management of property was gradually evolved as a primitive polyandrous people worked out their own form of civilization before Brahmin influênces were brought to bear upon them, but tradition ascribes it to the arbitrary fiat of a despot who wished to offer one of his sons as a sacrifice to the gods, but was thwarted by the maternal affection of his wife, and had to fall back on a nephew given to him by his more pious, if less human, sister, in acknowledgment of which he decreed that all sons should hereafter forfeit their birth right in favour of sister's sons. The name of the despot is said to have been 'Bhútal Pándya,' to whom different periods are assigned from the earliest ages up to about 1250 A.D., when there reigned at Barkúr a prince with the suffix Pándya to his name, who seems to have been peculiarly obnoxious to the Brahmins. As the custom has successfully resisted all Brahmin and even Muhammadan influence amongst the Canara people who have adopted Hinduism or Muhammadanism, it is obvious that it must have been very firmly rooted before the Brahmins began to be powerful, about the eighth century of the Christian era.

The vesting of landed property in women, and the probably consequent greater equality of the sexes in conjugal relations, has

Játi-níti	1st—Játi:	The names and ranks of castes.
	2nd—Níti:	The rules to be observed and the means of enforcing them.
Mána-Maryády ..	3rd—Mána 4th—Maryády	The degree of respect to be paid to the different families in the village.
Hoottoo-Kattoo..	5th—Hoottoo 6th—Kattoo	The change of inheritance from the sons to the nephews, and subsequent establishment of the rights of the latter.

CHAP. IV. Customs.

been commonly supposed to be an immoral system when contrasted with the ordinary Hindu customs, and the married state of the classes following the 'Aliya Santana' rule of inheritance has even been branded by English courts as nothing more than concubinage, but when the habits of married people amongst the higher and more respectable Tulu classes are enquired into, the system is found to be little open to such a taunt. There is nothing in Canara analogous to the advantage said to have been taken of old polyandrous habits in parts of Malabar by certain classes of Brahmins, who, in their relations with Sudra women, are believed to have abused their reputation for superior sanctity; and although divorce on the initiative of the woman is a part of the system, it is controlled by public opinion. Unfaithfulness, clandestine or otherwise, while the marriage tie exists, is said to be much less common than among castes whose pretensions to morality are much higher, and it may be safely asserted that the women of the Aliya Santana castes, who seek a second husband by means of divorce, are much fewer in number than the men of other castes who take to themselves more than one wife. The propriety of the common idea of the comparative immorality of the Tulu marriage customs seems therefore either to be based on a misapprehension of facts, or to depend upon the assumption that the morality of a people is inseparably bound up with a conventional code, which strives to preserve the chastity of one sex by the severest penalties, while allowing the other the utmost latitude in the formation of either legalized or illicit connections. Amongst the poorer and lower Aliya Santana classes and castes the marriage ties and obligations are certainly of the loosest description, but not one whit more so than amongst corresponding South Indian castes on the east coast, in which property is vested in men and descends from father to son. Neither have shaken themselves free

Hoottoo-Katte ..	7th—Hoottoo 8th—Katte	Altering the ceremonies performed at births, marriages and deaths.
Hechchoo-Katle.	9th—Hechchoo 10th—Katle	The additional ceremonies of purification.
Bali-Banna ..	11th—Bali 12th—Banna	The particulars of the eighteen families into which a person might marry.
Sávoo-Bálu ..	13th—Sávoo 14th—Bálu	Settling the further rights of inheritance on the failure of maternal nephew.

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Bhútal Pándia declared that it was not necessary for the whole caste to purify on the birth, death, or marriage of one of its members, which is required by the Shastras, but only the family of the person need perform the required ceremonies. He also enjoined a particular observance of the Mána Maryády, so that to this day it is a matter of vast importance that each person should receive cocoanut, sandal-

from habits dating from old polyandrous days, and it is doubtful if the Sudra castes on the eastern coast can be said to be on the right track in endeavouring to combat them by the modern Brahminical expedients of infant marriage and perpetual widowhood.

Most Tulu castes are divided into septs, called *baḷis*, and members of the same *baḷi* may not intermarry. Similar exogamous sub-divisions are found in nearly all Dravidian castes and tribes, and the exogamous *gótras* of the Brahmins and other Áryan castes are well known. The majority of the Tulu *baḷis* seem to be called after deceased ancestors, generally females, for the *baḷi*, unlike the *gótra*, follows the female line. No trace of totemism has been discovered, except, strange to say, among the Shivalli Brahmins, an account of whose sub-divisions is given below, but further investigation may show similar traces of totemism in other castes also. There are some *baḷis* so closely connected that they are regarded as a single exogamous group, and a further restriction on in-and-in breeding is found in the rule that a man may not marry his paternal uncle's daughter, even though she belongs to a different *baḷi*. If a man and a woman belonging to the same *baḷi* have intercourse, they are expelled from the caste. It is clear, indeed, that the rules of exogamy are founded upon a strong instinctive aversion to sexual acts between persons who have been brought up together or are closely connected. The marriage of girls in infancy is comparatively rare among the bulk of the population. The essential element of the marriage ceremony is *dháre*, or pouring water over the joined hands of the bride. Widows are usually allowed to remarry, but the custom of the Levirate is not found, except perhaps among the Gaudas; indeed, among many castes a widow is expressly forbidden to marry into the family of her deceased husband, and in very few cases, if any, may she marry his elder brother, though in a number of castes she is allowed to marry the younger.

Polygamy is permitted, but is not much practised. There is no extensive prohibition of the marriage of two sisters, though in some castes a man cannot have two sisters to wife at the same time.

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wood and flowers according to his rank . . . . It was also settled by Bhútal Pándia that if there were no nephews or nieces to succeed to the estate, one of the other families should furnish an heir.

A Brahminized account of the origin of the custom with the rules in full was published in 1859 in Canarese by the German Mission Press, Mangalore, and a translation appeared in the Madras Journal of Literature and Science in July 1864. Though the history is mythical, the rules contain probably the best existing statement of the unwritten law as it prevailed when they were drawn up. A revised translation with notes and references to decisions of the Civil Courts was published in 1873 by M.R.Ry. T. Gopalkristnah Pillai, who was then Huzur Sherishtadar, Mangalore.

CHAP. IV. CUSTOMS.

When a second wife is taken it is usually because the first is barren or suffering from leprosy or other incurable disease. Polyandry does not now exist.

The dead are generally cremated and various ceremonies for the repose of the soul of the deceased are performed on the seventh, ninth or eleventh day after death. The *shráddha*, or annual individual ceremony, is not common, but the *mahálaya*, an annual ceremony in honour of all deceased ancestors, is found under that or some other name in nearly every caste. The use of spirituous liquors and of fish and flesh (except beef) is very general.

CASTES.

The whole of the population, with the exception of Musalmans, Christians, Jains, and followers of other well-known religions, call themselves Hindus, although many of them, and especially those of the depressed classes, have practically nothing to do with the Hindu religion. The Hindus, within this meaning of the term, form upwards of four-fifths of the population and returned themselves at the last census under more than 600 separate caste divisions. The most important of these are given below arranged generally in the classes adopted for census purposes.

BRAHMINS.

Brahmins.—The following are the principal sub-divisions of Brahmins:

1. Chitpávan or Konkanasht.	7. Konkani.
2. Déshasht.	8. Kóta or Kótéshwar.
3. Gauda.	9. Pádia.
4. Havík.	10. Saklápuris.
5. Kandávara.	11. Sárasvat.
6. Karádi.	12. Shivalli.

The Shivalli, Kóta, Havík and Kandavára Brahmins are the old Tulu Dravida Brahmins, and though the Havíks and Kótas now speak Canarese, their religious books are written in Tulu. The Konkanashts or Chitpávans and Déshashts are old Dravidian Brahmins of Maráthi extraction. The Sárasvats and Gaudas are also of Maráthi descent, but they belong to the Gauda division as do also the Konkanis, most of whom seem, at the last census, to have returned themselves as Sárasvats to avoid being confused with Konkanashts, who are not of the Gauda division.

Tulus.

All Tulu Brahmin chronicles agree in ascribing the creation of Malabar and Canara, or Kérala, Tuluva and Haiga, to Parasu Ráma, who reclaimed from the sea as much land as he could cover by hurling his battle axe from the top of the Western Ghauts. According to Tulu traditions, after a quarrel with Brahmins who used to come to him periodically from Ahi-Kshétra, Parasu Ráma procured new Brahmins for the reclaimed tract by taking the nets

of some fishermen and making a number of Brahminical threads with which he invested the fishermen and thus turned them into Brahmins, and retired to the mountains to meditate, after informing them that if they were in distress and called on him he would come to their aid. After the lapse of some time during which they suffered no distress, they were curious to know if Parasu Ráma would remember them and called upon him in order to find out. He promptly appeared, but punished their thus mocking him by cursing them, and causing them to revert to their old status of Sudras. After this there were no Brahmins in the land till Tulu Brahmins were brought from Ahi-Kshétra by Mayúr Varma of the Kadamba dynasty.

A modified form of the tradition states that Parasu Ráma gave the newly reclaimed land to Nága and Machi Brahmins, who were not true Brahmins and were turned out or destroyed by fishermen and Holeyas (Pariahs) who held the country till the Tulu Brahmins were introduced by Mayúr Varma.

All traditions unite in attributing the introduction of the Tulu Brahmins of the present day to Mayúr Varma, but they vary in details connected with the manner in which they obtained a firm footing in the land. One account says that Habáshika, chief of the Koragas (Pariahs), drove out Mayúr Varma, but was in turn expelled by Mayúr Varma's son, or son-in-law, Lókáditya of Gókarnam, who brought Brahmins from Ahi-Kshétra and settled them in thirty-two villages. Another makes Mayúr Varma himself the invader of the country, which till then had remained in the possession of the Holeyas (Pariahs) and fishermen who had turned out Parasu Ráma's Brahmins. Mayúr Varma and the Brahmins whom he had brought from Ahi-Kshétra were again driven out by Nanda, a Holeya chief, whose son Chandra Sayana had, however, learned respect for Brahmins from his mother, who had been a dancing girl in a temple. His admiration for them became so great that he not only brought back the Brahmins, but actually made over all his authority to them and reduced his people to the position of slaves. A third account makes Chandra Sayana, not a son of a Holeya king, but a descendant of Mayúr Varma and a conqueror of the Holeya king.

Nothing is known from other sources of Lókáditya, Habáshika or Chandra Sayana, but inscriptions speak to Mayúr Varma being the founder of the dynasty of the Kadambas of Banavási in North Canara. His date is usually put down at about 750 A.D. The correctness of the traditions, which prevail in Malabar as well as in Canara, assigning the introduction of Brahmins to the west coast to Mayúr Varma, who was in power about 750 A.D., is to

CHAP. IV. BRAHMINS. Tulus.

some extent corroborated by the fact that Brahmins attested the Malabar Perumal's grant to the Christians in 774 A.D., but not that to the Jews about 700 A.D.

The Brahmins are said to have been brought from Ahi-Kshétra, on the banks of the Gódávari, but it is not clear what connection a Kadamba of Banavási could have with the banks of the Gódávari, and there may be something in the suggestion made in the *North Kanara Gazetteer* that Ahi-Kshétra is merely a sanskritised form of Haiga or the land of snakes. The tradition speaks of the Brahmins having been brought by Lókáditya from Gókarnam which is in the extreme north of Haiga, and in the local history of the Honalli Matha in Sunda in North Canara, Gókarnam is spoken of as being in Ahi-Kshétra. Gókarnam is believed to have been a Brahmin settlement in very early times and there was probably a farther influx of Brahmins there as Muhammadan conquest advanced in the north.

The class usually styled Tulu Brahmins at the present day are the Shivalli Brahmins, whose head-quarters are at Udipi, and who are most numerous in the southern part of the district, but the Kóta, Kótéshwar and Haiga or Havíka Brahmins are all branches of the same, the differences between them having arisen since their settlement in Canara, and though they now talk Canarese in common with the people of other castes to the north of the Sítanadi river, their religious works are still written in the old Tulu-Malayálam character. Tulu Brahmins, who have settled in Malabar in comparatively late years, are known as Embrántris and treated as closely allied to the Nambútiris whose traditions also go back to Mayúr Varma. Some families of Shivalli and Havíka Brahmins in the southern or Malayálam portion of the district talk Malayálam and follow many of the customs of the Malabar or Nambútiri Brahmins.

Many of the thirty-two villages in which the Brahmins are said to have been settled by Mayúr Varma are still the most important centres of Brahminism. Notably may be mentioned Shivalli or Udipi, Kóta and Kótéshwar, which have given names to the divisions of Tulu Brahmins of which these villages are respectively the head-quarters.

When the Brahmins were introduced by Mayúr Varma they are said to have been followers of Bhattácharya, but they soon adopted the tenets of the great Malayálam Védántic teacher, Sankaráchárya, who is ordinarily believed to have been born at Cranganore in Malabar in the last quarter of the eighth century, that is, soon after the arrival of the Brahmins on the west coast. Sankaráchárya is known as the preacher of the Advaita (non-dual)

philosophy which, stated briefly, and therefore, of course, very imperfectly, is that all living beings are one with the supreme spirit, and absorption may finally be obtained by the constant renunciation of material in favour of spiritual pleasure. This philosophy, however, was not sufficient for the common multitude, and his system included, for weaker minds, the contemplation of the first cause through a multitude of inferior deities, and, as various manifestations of Siva and his consort Párvati, he found a place for all the most important of the demons worshipped by the early Dravidians whom the Brahmins found on the west coast, thus facilitating the spread of Hinduism throughout all classes. That the conversion of the Bants and Billavas and other classes took place at a very early date may be inferred from the fact that though the great bulk of the Tulu Brahmins of South Canara adopted the teaching of the Vaishnavite reformer Mádhavácharya, who lived in the thirteenth century, most of the non-Brahmin Hindus in the district class themselves as Shaivites to this day. Sankaráchárya founded the Sringéri Matha in Mysore near the borders of the Udipi taluk, the Guru of which is the Spiritual head of such of the Tulu Brahmins of South Canara as have remained Smárthas or adherents of the teaching of Sankaráchárya. Mádhaváchárya is believed to have been born about 1199 A.D. at Kaliánpur a few miles from Udipi. He propounded the 'Dvaita' or dual philosophy, repudiating the doctrine of oneness and final absorption held by ordinary Vaishnavites as well as by the followers of Sankaráchárya. The attainment of a place in the highest heaven is to be secured according to Mádhaváchárya's teaching not only by the renunciation of material pleasure, but by the practice of virtue in thought, word and deed. The moral code of Mádhaváchárya is a high one, and his teaching is held by some —not ordinary Hindus of course—to have been affected by the existence of the community of Christians at Kaliánpur mentioned by Cosmos Indico Pleustes in the seventh century. Mádhaváchárya placed the worship of Vishnu above that of Siva, but there is little bitterness between Vaishnavites and Shaivites in South Canara, and there are temples in which both are worshipped under the name of 'Shankara-Náráyana.' He denied that the spirits worshipped by the early Dravidians were manifestations of Siva's consort, but he accorded sanction to their worship as supernatural beings of a lower order.

Shivallis.

Shivalli Brahmins.—The Tulu-speaking Brahmins of the present day are almost all followers of Mádhaváchárya, though a few remain Smárthas, and a certain number follow what is known as the 'Bhagavat Sampradáyam' and hold that equal honour is due to both Vishnu and Siva. They are now

CHAP. IV. BRAHMINS. Shivallis.

generally called 'Shivalli' Brahmins, their head-quarters being at Udipi or Shivalli, a few miles from Mádhavácharya's birth-place. Here Mádhavácharya is said to have resided for some time and composed thirty-seven controversial works after which he set out on a tour. The temple of Krishna at Udipi is said to have been founded by Mádhavácharya himself, who set up in it the image of Krishna originally made by Arjuna, and miraculously obtained by him from a vessel wrecked on the coast of Tuluva. In it he also placed one of three 'Sálagráms' presented to him by the sage Véda Vyása. Besides the temple at Udipi he established eight 'Mathas' or sacred houses, each presided over by a *sanyási* or *swámi*. These exist to this day and each *swámi* in turn presides over the temple of Krishna for a period of two years and spends the intervening fourteen years touring throughout Canara and the adjacent parts of Mysore levying contributions from the faithful for the expenses of his next two years of office, which are very heavy, as he has to defray not only the expenses of public worship and of the temple and Matha establishments, but must also feed every Brahmin who comes to the place. The following description of a Matha visited by Mr. Walhouse gives a very good idea of what one of these buildings is like:[6] "The building was two-storeyed enclosing a spacious quadrangle "round which ran a covered verandah or cloister; the wide porched "entrance opened into a fine hall supported by massive pillars "with expanding capitals handsomely carved; the ceiling was also "wooden, panelled and ornamented with rosettes and pendants, "as in baronial halls and so were the solid doors. Within these "was an infinity of rooms, long corridors lined with windowless "cells. Apartments for meditation and study, store-rooms over-"flowing with all manner of necessaries, granaries, upper rooms "with wide projecting windows latticed instead of glass with "pierced wood-work in countless, tasteful patterns, and in the quad-"rangle there was a draw-well and small temple, while a large "yard behind contained cattle of all kinds from a goat to an ele-"phant. All things needful were here gathered together. Brah-"mins and lay brothers walked gravely about, or sat in corners "with written palm leaves in their hands. Outside sat pilgrims, "poor devotees and beggars waiting for the daily dole, and vil-"lagers were continually arriving with grain, vegetables, &c."

The periodical change of the *swámi* presiding over the temple of Krishna is the occasion of a great festival known as the 'Pariyáya' when Udipi is filled to overflowing by a large concourse of

[6] Fraser's *Magazine*, May 1875.

Shivallis.

Mádhvas not only from the district but from more distant parts, especially from the Mysore territory.

The following is a description of a festival at the Udipi Krishna temple witnessed by Mr. Walhouse:[7] "Near midnight when the "moon rode high in a cloudless heaven, his (Krishna's) image, not "the very sacred one, which may not be handled, but a smaller "duplicate was brought forth by four Brahmins and placed under "a splendid canopy on a platform laid across two large canoes. "The whole square of the tank was lit up with a triple line of "lights. Small oil cressets at close intervals, rockets and fireworks "ascended incessantly and the barge, also brilliantly lit up, and "carrying a band of discordant music, and Brahmins fanning the "image with silver fans, was punted round and round the tank "amid loud acclamations. After this the image was placed in a "gorgeous silver plated beaked palanquin, and borne solemnly "outside the temple, to the great idol car that stood dressed up "and adorned with an infinity of tinsel, flags, streamers and flower "wreaths. On this it was lifted, and placed in a jewelled shrine, "amidst a storm of applause and clapping of hands—these seem "the only occasions when Hindus do clap hands—and then with "all the company of Brahmins headed by the swámis marching "in front, followed by flambeaus and wild music, the car was "slowly hauled by thousands of votaries round the square which "was illuminated by three lines of lights, ascending at intervals "into pyramids. A pause was made half-way when there was "a grand display of rockets, fire fountains and wheels, and two "lines of camphor and oiled cotton laid along the middle of the "road was kindled and flamed up brilliantly. Then the car moved "on to thė entrance of the temple and the god's outing was "accomplished."

Another famous temple of the Shivallis is Subramanya at the foot of the ghauts on the Coorg border, and here also Mádhavácharya deposited one of Véda Vyása's 'sálagráms.' It existed before his time, however, and, as the name indicates, it is dedicated to the worship of Siva. In addition to this it is the principal centre of serpent worship in the district.

Many of the Shivalli Brahmins are fair complexioned with well-cut intelligent features. A number of them own land which they cultivate by tenants or by hired labourers, and there are several wealthy families with large landed properties, but the great bulk of them are either astronomers, astrologers, *tantris*, *purohitas*, worshippers in temples or professional beggars. They have

[7] Fraser's *Magazine*, May 1875.

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been backward in availing themselves of English education and consequently not many of them are to be found holding important posts under Government or in the professions, but a few have come to the front in late years. A good many of them are village accountants and teachers in village schools.

The women, as is usually the case amongst all classes, are fairer than the men. Their education is even more limited, but they are said to be well trained for the discharge of household and religious duties. They wear the cloth falling as low as the feet in front, but not usually so low behind, especially on festive occasions, the end being passed between the legs and tucked into the fold of the cloth round the waist. Like all Brahmin women in Canara they are fond of wearing sweet-scented flowers in their hair.

The language of the Shivalli Brahmins is Tulu except to the north of the Sítanadi river, where closer intercourse with the ruling Canarese classes above the ghauts for several centuries has led to the adoption of that language by all classes. Their religious books are in Sanskrit, and, even north of the Sítanadi river, they are written in the old Tulu-Malayálam character. They have no other literature worth speaking of.

Their houses are all neat, clean and provided with verandahs, and a yard in front, in which stands, in a raised pot, a plant of the *tulasi* or sacred basil (*Ocymum sanctum*). Some of the houses of the old families are really large and substantial buildings with an open courtyard in the centre.

Men and widows bathe the whole body every day before breakfast, but married women bathe only up to the neck, it being considered inauspicious for them to bathe the head also. In temples and religious houses males bathe in the evening also. An oil bath is taken once a week.

They are, of course, abstainers from animal food and spirituous liquors, and a prohibition extends to some other articles such as onions, garlic, mushrooms, &c. At times of marriages, deaths or initiations, it is usual to give feasts which may be attended by all Dravida Brahmins.

The Shivallis have 252 *gótras* and the names of the following seem to be of totemistic origin :

Name of gótra.	Meaning.
Kudrettáya	from *kudre*, a horse, and *taya*, belonging to.
Tálitáya	a palmyra tree.
Manólitáya	name of a vegetable.
Shunnatáya	chunam, lime.
Kalambitáya	a kind of box.

Shivallis.

Name of gótra.	Meaning.
Nellitáya	the Indian gooseberry.
Nánélatáya	name of a tree.
Góli	a banian tree.
Áne	an elephant.
Perḷatáya	name of a fruit.

These names were obtained from one of the eight *swámis* or *gurus* of the Udipi math and according to him they have no totemistic force at the present day. He contented himself with the statement that the names of *gótras* had no meaning.

Girls must be married before maturity, and the ordinary age now-a-days is between five and eleven. The age of the bridegroom is usually between fifteen and five and twenty. A maternal uncle's daughter can be married without consulting any horoscope, and during the marriage ceremonies it is customary for a bridegroom's sister to obtain from him a formal promise that if he has a daughter he will give her in marriage to her son. The marriage ceremonies usually take place in the house of the bride's relations and last for four or five days. The bride sometimes remains at her parent's house till she comes of age. Widows take off all their ornaments and wear a red or white cloth. They ought not to attend any auspicious ceremonies or festivals, but of late years there has been a tendency to relax the severity of the restrictions on a widow's freedom, and a young widow is allowed to keep her head unshaven and to wear a few ornaments. Of course they are not allowed to remarry. A few Shivallis in the Malayálam-speaking portion of the Kásaragód taluk follow the customs and manners of the Malayálam Brahmins, and amongst these a girl does not lose caste by remaining unmarried until she comes of age.

Kótéshwars.

Kótéshwar Brahmins are a small body who take their name from Kótéshwar in the Coondapoor taluk. They are practically the same as the Shivalli Brahmins, except that like all classes in the Coondapoor taluk, they talk Canarese.

Havíkas.

Havíka, Havíga or **Haiga** Brahmins are the descendants of the section of the Brahmins brought in by Mayúr Varma who settled within the tract known as Haiga which comprised the southern part of North Canara and the extreme northern part of South Canara.

They did not, like the Shivallis, adopt the teaching of Mádhavácharya, but remained followers of Sankaráchárya, and they now speak Canarese, the prevailing language of the place, though their religious and family records are written in the old Tulu-Malayálam character. Though originally of the same stock, a distinction has arisen between them and the Shivalli Brahmins, and they do not

CHAP. IV. BRAHMINS. Havíkas.

intermarry though they may eat together. A number of Havíka Brahmins are to be found scattered throughout South Canara engaged for the most part in the cultivation of areca-palm gardens, in which they are very expert. A very well-to-do colony of them is to be found in the neighbourhood of Vittal in the Kásaragód taluk where they grow areca-nuts which are valued only second to those grown in the mágane of the Coondapoor taluk above the ghauts.

The Havíka Brahmins, perhaps owing to their residing for many generations in the comparatively cool shade of the areca-nut gardens, are specially fair even for west coast Brahmins. This fairness of complexion is particularly noticeable in the women who do not differ much in their manners and customs from the Shivalli Brahmin women, except that they take a prominent part in the work of the gardens, and never on any occasion wear the end of their cloth passed through the legs and tucked up behind. The Havík widows are allowed more freedom than in most other classes. Some Havík Brahmins in the Malayálam portion of the Kásaragód taluk have, like the Shivallis in the same locality, adopted the language and customs of the Malayáli Brahmins.

Kótas.

Kóta Brahmins, so called from a village in the northern part of the Udipi taluk, are like the Havíks, Smárthas or followers of Sankaráchárya and now speak Canarese, but the breach between them and the Shivallis is not so wide, as intermarriages occasionally take place. In the Coondapoor taluk and the northern part of the Udipi taluk the Kótas occupy a place in the community corresponding to that taken by the Shivallis throughout the rest of the district.

Saklápuris.

Saklápuris, of whom there are a few in the district, are what may be called a dissenting sect of Havíkas who, a few years ago, renounced their allegiance to the Rámchandrapura matha in favour of one at Saklápuri near the boundary between North and South Canara. Like the Havíkas they speak Canarese.

Kandávaras.

Kandavaras obtain their name from the village of Kandávar in the Coondapoor taluk. They are commonly known as *Udapas* and they all belong to one gótram, that of Visvamitra. They are, therefore, precluded from marrying within the caste and take their wives and husbands from the ranks of the Shivalli Brahmins. They are, indeed, said to be the descendants of a Shivalli Brahmin, who settled in Kandávar about seven or eight centuries ago. The head of the Annu Udapa family, which is called after this ancestor, is the hereditary head of the caste and presides over all panchâyats or caste councils. They speak Canarese. Their title is *Udapa* or *Udpa*.

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Déshashts.

Déshashts.—The Déshashts are settlers of comparatively recent times who seem to have come into South Canara from the north, as they ordinarily speak Maráthi. They at one time held a number of important posts under Government, but have failed to keep up with the educational requirements of the day, and the only Déshashts of position in South Canara now-a-days are landowners and merchants. Both Smárthas and Mádhavas are to be found amongst them.

Karádis.

Karádi Brahmins are immigrants from Satara and other places of the Marátha country. The tradition is that Parasu Ráma created them from camel bones. Intermarriages may take place between them and the Déshashta Brahmins. They are Smárthas and owe allegiance to the Sringéri math of Sankaráchárya.

Chitpávans.

Chitpávan Brahmins are practically the same as the Konkanashts of Ratnagiri or Goa, some of whom seem to have gradually spread down the coast. They are Smárthas and adherents of the Sringéri math of Sankaráchárya. There are but few of them in South Canara, the best known being, like the Havíks, well-to-do owners of areca-nut plantations, notably in the neighbourhood of Kárakal and Beltangadi.

Pádias.

Pádia Brahmins are also Maráthi immigrants. They are Smárthas and, like the last two divisions mentioned above, acknowledge the authority of the head of Sringéri math. They can intermarry with Karádi and Chitpávan Brahmins. The binding portion of their marriage ceremony is the pouring of water and not the seven steps round the sacrificial fire. Their usual titles are *Rao* and *Bhatta*.

Gauda Brahmins.

Brahmins of the Gauda-Drávida division are comparatively recent settlers in South Canara, but there are two classes of them who now form important sections of the community—the Konkanis and the Sárasvats.

Konkanis.

Konkani Brahmins are said to have originally come from Tirhoot and settled in sixty-six villages near Goa; hence they are sometimes called Sasashtikars. A large number of them moved down to Canara when the Portuguese supremacy was at its height, and in their homes they continue to use their old language Konkani. They are almost all Mádhavas, but they have mathas of their own, distinct from the Udipi mathas of the Shivallis, and specially affect the worship of Venkatramana, in whose honour a temple is erected wherever Konkanis come together in any numbers. The Konkanis claim to belong to the Gauda-Sárasvat class of Gauda-Drávida Brahmins, and at the last census numbers of Konkanis have returned themselves as Sárasvats, probably to avoid being confused with the Konkanashts or Chitpávans who do not belong to the Gauda-Drávida division.

CHAP. IV. BRAHMINS. Konkanis.

A certain number of the Konkanis in South Canara are wealthy landowners and some occupy very high positions in the Government service for which they have of late years taken more care to qualify themselves than they did in the early days of the British rule. The great bulk of them are shopkeepers, in which capacity they are to be found in almost every bazaar throughout the district. In 1801 Dr. Buchanan wrote about the Konkanis of Manjéshwar: "They are in flourishing circumstances; and I saw "some of their marriage processions passing to-day, attended by a "number of exceedingly well dressed people and very handsome "girls." A similar remark might be made of them at the present day in any of the larger towns of South Canara.

Sárasvats.

Sárasvat Brahmins are very numerous in South Canara. They claim, like the Konkanis, to have migrated long ago from the banks of the Sárasvati in Tirhoot. The village in which they settled was Kushastala near Goa, whence they have spread southwards to North and South Canara. They are generally Smárthas, or else followers of the 'Bhagavat Sampradáyam,' but there are also a few Vaishnavas amongst them. Of late years, however, many of them have shown a reforming tendency, and societies have been established amongst them for purely spiritual worship.

They are an active and progressive class and their intelligent readiness to adapt themselves to the requirements of the day has led to positions of influence both in Government service and in the professions being held by them in numbers altogether out of proportion to their numerical standing in the community. As a class they are mainly writers, shopkeepers and teachers. Both men and women have fair complexion and handsome features.

TEMPLE SERVANTS—Stánikas.

Stánikas are said to be the descendants of Brahmins by Brahmin widows and outcaste Brahmin women, corresponding with Manu's *goláka*. They however now claim to be Siva Brahmins, forcibly dispossessed of authority by the Mádhvas, and state that the name Stánika is not that of a separate caste, but indicates their profession as managers of temples, with the title of Déva Stánika. This claim is not generally conceded and as a matter of fact the duties in which Stánikas are employed are clearly those of temple servants, namely collecting flowers, sweeping the interiors of temples, looking after the lamps, cleaning the temple vessels, ringing bells and the like. Many of them, however, are landowners and farmers. They are generally Saivites and wear the sacred thread. Their special deities are Venkatramana and Ganapati. Drávida Brahmins officiate as their priests, but of late some educated men of the caste have assumed the priestly

office. The caste has two sub-divisions, viz., Subramania Stánikas and Kumbla Stánikas, but it is not clear whether these are endogamous groups. They have exogamous sub-divisions, which are called *gótras* as among the Brahmins. Girls must be married in infancy, *i.e.*, before they attain puberty. Widow remarriage is neither permitted nor practised. Their other customs are almost the same as those of the Kóta Brahmins. They neither eat flesh nor drink liquor. Their social disputes are settled at caste meetings. They are called *Shánbógs* and *Mukhtesars*.

CHAP. IV. TEMPLE SERVANTS. Stánikas.

Dévadigas.—This is a class of servants, chiefly musicians in Hindu temples, but many of them are engaged in cultivation and other pursuits. They are also known as Moyilis, but there is a separate caste called Kannada Moyilis, and Dévadigas will not eat with them. They are Vaishnavites, and Tulu Brahmins are their priests. Remarriage of widows is permitted, but it is practised only in the case of young widows. They eat flesh and drink liquor.

Dévadigas.

Moyilis, or **Moylars,** are admittedly the descendants of the children of women attached to the temples, and their ranks are even now swelled in this manner.[8] Their duties are similar to those of the Stánikas.

Moyilis.

Sappaligs appear to be identical with the Dévadigas in North Canara, though they are regarded as distinct castes in South Canara. The Sappaligs are, as the name *sappal* (noise) implies, a class of musicians in temples, but a number of them are cultivators.

Sappaligs.

Traders number 95,000 according to the last census, but 90,345 of these are Máppillas and 2,104 are Naváyats. These will be described in the section on Musalmáns. The only other

TRADERS.

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[8] The following account of the origin of the Moylars was given by Buchanan in 1801:

"In the temples of Tuluva there prevails a very singular custom which has given "origin to a caste named Moylar. Any woman of the four pure castes—Brahmin, "Kshatriya, Vaisya or Sudra—who is tired of her husband, or who (being a widow "and consequently incapable of marriage) is tired of a life of celibacy, goes to a tem-"ple and eats some of the rice that is offered to the idol. She is then taken before "the officers of Government, who assemble some people of her caste to inquire into "the cause of her resolution; and if she be of the Brahmin caste to give her an op-"tion of living either in the temple or out of its precincts. If she choose the former, "she gets a daily allowance of rice and annually a piece of cloth. She must sweep "the temple, fan the idol with a Tibet cow's tail (Bos gruiens) and confine her amours "to the Brahmins. In fact she generally becomes a concubine to some officer of "revenue who gives her a trifle in addition to her public allowance and who will flog "her severely if she grant favours to any other person. The male children of these "women are called Moylar, but are fond of assuming the title of Stánika and wear "the Brahminical thread. As many of them as can procure employment live about "the temples, sweep the areas, sprinkle them with an infusion of cowdung, carry "flambeaus before the gods and perform other similar low offices." Buchanan, vol. iii. p. 65, edition of 1807.

CHAP. IV. TRADERS.

trading castes of numerical importance are the Banajigas, Balijas, Chettis and Vaisyas; the last is not a caste name at all and 'Chetti' is used far more as a title than as a real caste name. Balijas are the well-known Telugu trading caste and Banajiga is the Canarese form of this name. In addition to the above, however, trade is carried on by Konkani Brahmins, by Native Christians, by Rájápuris, who are shown in the census returns as agriculturists, and by Vánis, who have been wrongly classified as oil-pressers.

Rájápuris.

Rájápuris.—The Rájápuris, also called Bálólikars, were originally traders and perhaps have some claim to be considered Vaisyas. In social status they admit themselves to be inferior only to Brahmins. They wear the sacred thread, profess the Saiva faith and employ Karádi Brahmins as priests in all their ceremonies. Their girls should be married before the age of puberty, and marriage of widows is not permitted. The marriage ceremony chiefly consists in the hands of the bride and bridegroom being united together and held by the bride's father while her mother pours water over them. The water should first fall on the bride's hands and then flow on to those of the bridegroom. This takes place at the bride's house. A curious feature in the ceremony is that for four days either the bride or bridegroom should occupy the marriage-bed; it must never be allowed to become vacant. On the fourth day the couple go to the bridegroom's house where a similar 'sitting' on the marriage-bed takes place. They are mostly vegetarians, rice being their chief food, but some use fish and rear fowls and goats for sale as food. Many are now cultivators.

Vánis.

Vánis or **Bandekars** have been wrongly classified in the census returns as oil-pressers; they are in reality traders. They are said to have come from Goa and they speak Konkani. Their spiritual *guru* is the head of the Kumbakónam math. There is nothing in their customs calling for a special remark.

HUSBANDMEN.

Husbandmen, including the classes formerly military and dominant, are the most numerous of all the caste groups. The following are the most important members of the group:

1. Bant.
2. Gauda.
3. Kshatriya.
4. Malava.
5. Maráti.
6. Múdumane.
7. Nádava.
8. Náyar.
9. Séregár.
10. Vakkaliga.

Bants.

Bants.—The Bants (pronounced Bunts), as their name implies (*Bant* in Tulu=a powerful man, a soldier) were originally a military class corresponding to the Náyars of Malabar, and the use of

the term Nádava instead of Bant in the northern portion of South Canara points, amongst other indications, to a territorial organization by 'Náds' similar to that described by Mr. Logan[9] as prevailing in Malabar. But few traces of any such organization now prevail, great changes having been made when the Vijayanagar Government introduced, more than five hundred years ago, a system of administration under which the local Jain chiefs, though owing allegiance to an overlord, became more independent in their relations with the people of the country. Under the Bednore kings, and still more under the Mysore rule, the power of the chiefs was also swept away, but the old local organization was not reverted to.

The Bants are now the chief land-owning and cultivating class and are, with the exception of the Billavas or toddy-drawers, the most numerous caste in the district. Most of them are Hindus by religion, and rank as Sudras, but about ten thousand of them are Jains and the distinctions between these and the ordinary or 'Másádik' Bants are explained in the section relating to the Jains. It is probable that during the political supremacy of the Jains, a much larger proportion of the Bants professed adherence to that religion than now-a-days. In addition to their Hinduism or Jainism, all continue to follow the ancient demon or 'Bhúta' worship of the early Dravidians, much of which, however, has been absorbed into modern Hinduism. There are four principal sub-divisions of the caste, viz., *Másádika* Bants, who are the ordinary Bants of Tuluva; the *Nádava* or *Nád* Bants, who speak Canarese and are found in the northern part of the district; the *Parivára* Bants, who do not follow the Aliya Santana system of inheritance; and the Jain Bants. Members of these sub-divisions may not intermarry, but instances have recently occurred of marriages between Másádika and Nád Bants.

Nothing very definite is known of the origin of the Bants, but Tuluva seems, in the early centuries of the Christian era, to have had kings who apparently were sometimes independent and sometimes feudatories of overlords such as the Pallavas, the early Kadambas, the early Chálukyans, the later Kadambas, the Western Chálukyans, the Kalachurians and the Hoysal Ballâls. This indicates a constant state of fighting which would account for an important class of the population being known as 'Bantaru' or warriors, and as a matter of course they succeeded in becoming the owners of all the land which did not fall to the share of the priestly class, the Brahmins. Ancient inscriptions speak of kings

[9] Logan's *Malabar*, pp. 110–112, 131–133, 266–272.

CHAP. IV. HUSBANDMEN. Bants.

of Tuluva, and the Bairasu Wodears of Kárakal, whose inscriptions have been found at Kalasa as early as the twelfth century, may have exercised power throughout Tuluva or the greater part of it, but when the Vijayangar dynasty became the overlords of Canara in 1336, there were then existing a number of minor chiefs who had probably been in power long before, and the numerous titles still remaining amongst the Bants and Jains, and the local dignities known as 'Pattam' and 'Gadi' point to the existence from very early times of a number of more or less powerful local chieftains. The system peculiar to the west coast under which all property vests in females and is managed by the seniors of the family was also favorable to the continuance of large landed properties, and it is probable that it is only within comparatively recent times that sub-division of landed property became anything like as common as it is now. All the Bants, except the small section known as Parivár Bants and a few Jains, follow this 'Aliya Santana' system of inheritance, a survival of a time when the military followers of conquering invaders or local chiefs married women of the local land-owning classes, and the most important male members of the family were usually absent in camp or at court, while the women remained at the family house on the estate and managed the farms. The titles and the 'Pattams' or dignities have always been held by the male members, but, as they also go with the landed property, they necessarily devolve on the sister's son of a deceased holder, whence has arisen the name 'Aliya Santana' which means 'sister's son lineage.' A story is embodied in local traditions attributing the origin of the system to the fiat of a king called 'Bhútal Pándya,' whose wife refused to give her son for sacrifice while a sister was more pious, but this is obviously nothing more than an attempt to account for a matter which is not understood. As a similar custom prevails in Malabar, it no doubt originated before Tuluva and Kérala were separated. The small body of Parivár Bants and the few Jain Bants that do not follow the Aliya Santana system are probably the descendants of a few families who allowed their religious conversion to Hinduism or Jainism to have more effect on their social relations than was commonly the case.

Now that the ideas regarding marriage among the Bants are in practice assimilated to a great extent to those of most other people, the national rule of inheritance is a cause of much heart-burning and quarrelling, fathers always endeavouring to benefit their own offspring at the cost of the estate. A change would be gladly welcomed by many, but vested interests in property constitute an almost insuperable obstacle.

Bants.

The Bants do not usually object to the use of animal food, except, of course, the flesh of the cow, and they do not as a rule wear the sacred thread, but there is a section of them called Balláls, amongst whom heads of families abstain from animal food, and wear the sacred thread; these neither eat nor intermarry with the ordinary Bants. The origin of the Ballàls is explained by a proverb which says that when a Bant becomes powerful he becomes a Ballál. Those who have the dignity called 'Pattam' and the heads of certain families, known as Shettivalas or Heggades, also wear the sacred thread and are usually managers or 'Mukhtesars' of the temples and 'Bhútasthâns' or demon-shrines within the area over which in former days they are said to have exercised a more extended jurisdiction, dealing not only with caste disputes, but settling numerous civil and criminal matters. The Jain Bants are strict vegetarians, and they abstain from the use of alcoholic liquors, the consumption of which is permitted among other Bants, though the practice is not common. All classes usually take three meals a day, viz., a little conjee or gruel in the morning, dinner at noon and supper at night. The Jain Bants, however, avoid taking food after sunset.

The Bants are a fine stalwart race with a sturdy independence of manner and the comparatively fair complexions common to the west coast. The more well-to-do classes usually occupy substantial houses on their estates, in many of which there is much fine woodwork, and in some cases the pillars in the porches and verandahs, and the doorways, are elaborately carved. They have not as a rule yet largely availed themselves of European education, and consequently there are but few of them in the Government service, but amongst these few, some have attained to high office and been much respected. As is so often the case amongst high-spirited people of primitive modes of thought, party and faction feeling run high, and jealousy and disputes about landed property often lead to hasty acts of violence. Now-a-days, however, the last class of disputes more frequently lead to protracted litigation in the courts. They are fond of out-door sports, foot-ball and buffalo-racing being amongst their favorite amusements, but the most popular of all is cock-fighting. Every Bant, who is not a Jain, takes an interest in cock-fighting and large assemblages of cocks are found at every fair and festival throughout South Canara.

Under the system of inheritance above described the High Court has ruled that there is no marriage within the meaning of the Penal Code, but though divorce and remarriage are permitted to women, there are formal rules and ceremonies observed in connection with them, and amongst the well-to-do classes divorce is not

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looked upon as respectable, nor is it frequent. The *fictitious* marriage prevailing amongst the Náyars is unknown amongst the Bants, and a wife also usually leaves the family house and resides in her husband's, unless she occupies so senior a position in her own family as to make it desirable that she should live on the family estate.

The Bants are divided into twenty *balis* [10] which correspond with Brahmin *gótras*, except that they are traced in the female line, *i.e.*, a boy belongs to his mother's not to his father's *bali*. Children belonging to the same *bali* cannot marry and the prohibition extends to certain allied (*koodu*) *balis*. Moreover a man cannot marry his father's brother's daughter, though she belongs to a different *bali*. Infant marriage is not prohibited, but it is not common, and both men and women are usually married after they have reached maturity. There are two forms of marriage, one, called *kai-dháre*, for marriages between virgins and bachelors, and the other, called *budu-dháre*, for the marriage of widows. After a match has been arranged the formal betrothal, called *ponnapâthera* or *nischaya támbula*, takes place. The bridegroom's relatives and friends proceed in a body on the appointed day to the bride's house and are there entertained at a grand dinner, to which the bride's relatives and friends are also bidden. Subsequently the kárnavans of the two families formally engage to perform the marriage and plates of betel-nut are exchanged and the betel and nut partaken of by the two parties. The actual marriage ceremony is performed in the house of the bride or bridegroom, as may be most convenient. The proceedings commence with the bridegroom seating himself in the marriage *pandal*, a booth or canopy specially erected for the occasion. He is there shaved by the village barber and then retires and bathes. This done, both he and the bride are conducted to the *pandal* by their relations, or sometimes by the village headman. They walk thrice round the seat and then sit

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[10] *Bali* means 'a line.' Cf. Tamil *vali*. It is a common name for the exogamous septs of the Tuluva castes. The twenty *balis* of the Bants are as follow:

1. Bágettináya.
2. Bangárannáya.
3. Barmarannáya.
4. Bonnyannáya or Bunnannáya.
5. Hiribannáya or Siribannáya.
6. Karambarannáya.
7. Karburannáya.
8. Kellarabannáya.
9. Kochattabannáya or Kojjarannáya.
10. Kundónibannáya.
11. Kundalannáya.
12. Nelabannáya or Ujjettibannáya.
13. Pangalannáya.
14. Pergadannáya.
15. Pulyattannáya.
16. Sálabannáya or Aiyabannáya.
17. Sálannáya.
18. Talarabannaya.
19. Ulibannáya.
20. Upparannáya.

down side by side. The essential and binding part of the ceremony, called *dháre*, then takes place. The right hand of the bride being placed over the right hand of the bridegroom, a silver vessel (*dháregindi*) filled with water, with a cocoanut over the mouth and the flower of the areca-nut palm on the cocoanut, is placed on the joined hands. The parents, the managers of the two families and the village headmen all touch the vessel, which, with the hands of the bridal pair, is moved up and down three times. In certain families the water is poured from the vessel into the united hands of the couple and this betokens the gift of the bride. This form of gift by 'pouring water' was formerly common and was not confined to the gift of a bride. It still survives in the marriage ceremonies of various castes, and the name of the Bant ceremony shows that it must have once been universal among them. The bride and bridegroom then receive the congratulations of the guests who express a wish that the happy couple may become the parents of twelve sons and twelve daughters. An empty plate and another containing rice are next placed before the pair and their friends sprinkle them with rice from the one and place a small gift, generally four annas, in the other. The bridegroom then makes a gift to the bride; this is called *tírdóchi* and varies in amount according to the position of the parties. This must be returned to the husband if his wife leaves him or if she is divorced for misconduct. The bride is then taken back in procession to her home. A few days later she is again taken to the bridegroom's house and must serve her husband with food. He makes another money present to her and after that the marriage is consummated.

The foregoing account shows conclusively that the Bant marriage is a good deal more than concubinage. It is indeed as formal a marriage as is to be found among any people in the world and the freedom of divorce which is allowed cannot deprive it of its essential character. Widows are married with much less formality. The ceremony consists simply of joining the hands of the couple, but, strange to say, a screen is placed between them. All widows are allowed to marry again; but it is, as a rule, only the young women who actually do so. If a widow becomes pregnant she must marry or suffer loss of caste.

They all burn their dead, except in the case of children under seven and those who have died of leprosy or of epidemics like cholera or small-pox. The funeral pile must consist at least partly of mango-wood. The obsequies take place on the ninth, eleventh or thirteenth day, when people are fed in large numbers, but the Jains now substitute for this a distribution of cocoanut on the third, fifth, seventh or ninth days. The 'shrádh' ceremony is

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Gaudas.

Gaudas, also called *Hálvakkumakkalu*, are very numerously represented in the district. They have a somewhat elaborate system of caste government. In every village there are two headmen, the *Gráma Gauda* and the *Vattu* or *Gottu Gauda ;* for every group of eight or nine villages there is another head, called the *Mágane Gauda*, and for every nine máganés there is a yet higher authority called the *Kattémanéyava.* The caste is divided into eighteen *baris* or *baḷis*, which are of the usual exogamous character. The names of all of these have not been ascertained, but those of twelve of them are as follow : (1) Bangára, (2) Nandara, (3) Mulara, (4) Hemmana, (5) Sálu, (6) Kabru, (7) Góli, (8) Náyar, (9) Setti, (10) Basruvógaru, (11) Balasanna, and (12) Karmannáya.

Marriage is usually adult and sexual license before marriage with a member of the caste is tolerated, though nominally condemned. The *dhâre* form of marriage ceremony is used, but the bridal pair hold in their joined hands five betel-leaves, one areca-nut and four annas, and after the water has been poured the bridegroom ties a táli to the neck of the bride. Divorce is permitted pretty freely and divorced wives and widows can marry again. A widow with children, however, should marry only her late husband's elder brother. If she marries any one else the members of her former husband's family will not even drink water that has been touched by her. They burn their dead and once a year, in the month of Mituna (June-July), they perform a ceremony for the propitiation of all deceased ancestors. They have a special preference for Venkatramaswámi, to whom they make money offerings once a year in September. They employ Brahmins to give them sacred water when they are under pollution, but they do not seek their services for ordinary ceremonies. They are, for the most part, farmers, but some few are labourers; the latter receive 3 or 4 seers of paddy a day as wages. Their house language is Tulu in some parts and Canarese in others, but all follow the ordinary system of inheritance and not the custom of descent through females. Their title is *Gauda.*

Malavas.

Malavas or **Mala Bóvis** are a small cultivating caste, the members of which were formerly hunters and fishermen. They profess Vaishnavism and employ Shivalli Brahmins as their priests. Hanuman is their favourite deity. Like the Bants and other castes of Tuluva they are divided into exogamous septs called *balis* and have the *dhâre* form of marriage. They speak Canarese.

CHAP. IV. HUSBANDMEN. Maráthis.

Maráthi, as a caste name, is somewhat open to confusion and it is probable that many people of various castes, who speak Maráthi, are shown as being of that caste. The true Maráthi caste is said to have come from Goa and that place is the head-quarters. The caste is divided into twelve *wargs* or *balis*, which are exogamous sub-divisions. Caste disputes are settled by headmen called *Hontagaru*, and allegiance is paid to the head of the Sringéri math. The favourite deity is the goddess Mahádévi. Brahmins, usually Karádis, officiate at their ceremonies. Marriage is both infant and adult, and in the latter case it is said that immorality before marriage is condoned, provided it is committed with a man of the caste. The *dháre* form of marriage is used. Widows may remarry, but they cannot marry again into the family of the deceased husband—a rule which is just the reverse of the Levirate. In some parts, however, the remarriage of widows is prohibited. A husband or a wife can divorce each other at will and both parties may marry again. Maráthis are either farmers, labourers or hunters. They eat fish and flesh (except that of cattle and animals generally regarded as unclean) and they use alcoholic liquors. They speak either the ordinary Maráthi or the Konkani dialect of it.

Áres.

Áres are closely allied to the Maráthis; they usually speak Maráthi or Konkani, but in the Kásaragód taluk, and possibly in other parts too, they speak Canarese. Their exogamous sub-divisions are called *manathanas*. They use the *dháre* form of marriage, but the pot contains a mixture of water, milk, ghee, honey and curds instead of the usual plain water. The marriage of widows is prohibited and there is not the same freedom of divorce that we find among the Maráthis.

Sérvégáras.

Sérvégáras, *Kôtéyavas*, *Kshatris* or *Rámakshatris* are said to be a branch of the Konkan Maráthis of Goa, from whence they were invited by the Lingáyat kings of Nagara to serve as soldiers and to defend their fort (kôte) whence the alternative name of *Kôtéyava*. The mother-tongue of the Sérvégáras of South Canara is Canarese, while their brethren in the north speak Konkani. They have now taken to cultivation, but some are employed in the revenue and police departments as peons and constables, and a few are shopkeepers. The name Sérvégára is derived from Canarese *sérve*, an army. In religion they are Hindus, and like most west coast castes are equally partial to the worship of Siva and Vishnu. They wear the sacred thread. Karádi Brahmins are their priests, and they owe allegiance to the head of the Sringéri math. Their girls are married before puberty, and the remarriage of widows is neither allowed nor practised. Divorce is permitted only on the

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ground of the unchastity of the wife. The body of a child under three years is buried, and that of any person exceeding that age is cremated with the usual ceremonies. They eat flesh, but do not drink. Their titles are *Náyak*, *Aiya*, *Rao* and *Shérégar*.

Vakkaligas.

Vakkaligas are a Canarese caste of cultivators represented by a small number in this district. The Vakkaligas say they are the descendants of the Ballál Rájás of Ánegundi. The term Vakkaliga or Okkiliyan is derived from Canarese *okkalu*, which means cultivation or agriculture, so that as a caste name it corresponds to Vellála and Kápu, and there are many points of resemblance between the Vakkaligas and Kápus.

SHEPHERDS—Heggades.

Heggades are classified as shepherds, but the present occupation of the majority of them is cultivation. Their social position is said to be somewhat inferior to that of the Bants. They employ Brahmins as their priests. In their ceremonies the rich follow closely the Brahminical customs. On the second day of their marriage a pretence of stealing a jewel from the person of the bride is made. The bridegroom makes away with the jewel before dawn and in the evening the bride's party proceeds to the house where the bridegroom is to be found. The owner of the house is told that a theft has occurred in the bride's house and is asked whether the thief has taken shelter in his house. A negative answer is given, but the bride's party conducts a regular search. In the meanwhile a boy is dressed to represent the bridegroom. The searching party mistake this boy for the bridegroom, arrest him and produce him before the audience as the culprit. This disguised bridegroom, who is proclaimed to be the thief, throws his mask at the bride, when it is found to the amusement of all that he is not the bridegroom. The bride's party then confessing their inability to find the bridegroom, request the owner of the house to produce him. He is then produced and conducted in procession to the bride's house.

Kurumbas.

Kurumbas or **Kurubas** are not largely represented in the district. They speak Canarese and are believed to have come from Mysore. Caste affairs are settled by a council or pancháyat which is summoned by the *Gauda* or headman through his subordinate, the *Maniagára*. It is guided in its deliberations by the advice of the *Budhivanta*, or wise man. These caste officials receive small fees on the occasion of every marriage. The caste is divided into exogamous divisions, which are called *gótras* as among Brahmins. On the Mysore plateau these gótras are totemistic in character, but it is reported that nothing of this kind exists in Canara.

Artisans in Canara are generally of Canarese rather than Tulu origin, as they mostly speak Canarese and follow the ordinary rule of inheritance, but this is no doubt partly due to their not being land-owning classes. They wear a sacred thread like the Brahmins, but it is believed that their pretensions are due to increasing prosperity within comparatively recent times. Many of the Native Christians are also artisans. The following are the principal castes in this group:

1. Akkasálo } goldsmiths.	6. Cheptagár } carpenters.
2. Sonár } goldsmiths.	7. Kóláyari } carpenters.
3. Kammára, blacksmiths.	8. Charódi } carpenters.
4. Kanchugára, braziers.	9. Gudigár } carpenters.
5. Kalkatta, masons.	10. Muvvári. } carpenters.

Akkasálo.

Akkasáles are goldsmiths of Tulu origin, but a number of them work in iron, brass and wood also. The caste is divided into exogamous divisions (*gótras*). Caste affairs are settled by the *swámi* of Ánegundi, to whom reports are made by the local headmen, called Mukhtésars. Brahmins are employed as *purohits* only when men of their own caste are not available to perform that duty. In their customs and manners they closely resemble the Shivalli Brahmins. Both infant and adult marriages are allowed, but the former is much preferred. Widow marriage is strictly prohibited. The patron deity of the caste is Kálamma, though serpent-worship is very common. Like all artizan castes they worship the implements of their craft once a year. They style themselves *Áchári*.

Sonár.

Sonár or **Sonagára** is another goldsmith caste. They speak Konkani which is a dialect of Maráthi, and are believed to have come from Goa. The community at each station has one or two Mukhtésars or headmen who enquire into and settle the caste affairs; serious offences are reported to the *swamy* of Sode, who has authority to excommunicate or to inflict heavy fines. They wear the sacred thread and employ Brahmin priests. Marriages within the same *gótra* are strictly prohibited. Most of them are Vaishnavites, but a few worship Siva. The dead are burned and the ashes are thrown into a river. They eat fish but not flesh. Their title is *Setti*.

Cheptégára.

Cheptégáras are carpenters. They also speak Konkani and are believed to have come from the Konkan country. Caste affairs are managed by a Gurikár or headman, and the fines collected are paid to the head of the Sringéri math. They wear the sacred thread and employ Karádi Brahmins as purohits. Infant marriage is practised and widow marriage is not permitted. The

CHAP. IV. ARTISANS. dead are burned if means allow; otherwise they are buried. They are Saivites and worship Durga and Ganapati. They eat flesh and drink liquor. Their titles are *Naik*, *Shenai*, &c.

Cháródi. **Cháródis** are Canarese carpenters corresponding to the Konkani Cheptégáras, and there is very little difference in the customs and manners of the two castes, except that the former employ Shivalli and Konkanashta Brahmins instead of Karádis. Their title is *Naika*.

Gudigára. **Gudigáras** are a Canarese caste of wood-carvers and painters. They are Hindus of the Saivite sect and wear the sacred thread. Shivalli Brahmins officiate as their priests. Some follow the Aliya Santana mode of inheritance, others the ordinary law. They must marry within the caste, but not within the same *gótra* or family. Infant marriage is not compulsory, and they have the *dháre* form of marriage. Among those who follow the Aliya Santana law, both widows and divorced women may marry again, but this is not permitted among the other sections. The dead are either cremated or buried, the former being the preferential mode. The use of alcoholic liquor and fish and flesh is permitted. Their ordinary title is *Setti*.

Kanchugára. **Kanchugáras** are a Canarese caste of brass-workers. They are Hindus of the Vaishnava sect and they pay special reverence to Venkatramana of Tirupati. Their spiritual *guru* is the head of the Rámachandrapuram math. A man cannot marry within his own *gótra* or family. They have the ordinary system of inheritance through males. Girls must be married before puberty and the *dháre* form of marriage is used. The marriage of widows is not permitted and divorce is allowed only in the case of women who have proved unchaste. The dead are either cremated or buried in a recumbent posture. Brahmins officiate as their priests. The use of spirituous liquors and flesh and fish is permitted.

WEAVERS. There is not much weaving carried on in Canara. The Sáles are the most numerous, and they, as well as the Déváangas, are of Telugu origin. The Jádas are Canarese.

Dévángas and Jádas. **Dévángas** are a caste of weavers found in all parts of the Presidency, the name being derived from *Déva-angam*, or the limb of God. They are divided into two large linguistic sections, the Telugu and Kannada Dévángas; the former are usually called Dévángas, while the latter are known as Jádas (Jándras), which means 'great men.' They wear the sacred thread, and the Jádas, unlike the Dévángas, aspire to Brahminical rank, but their pretension is ridiculed by all other castes, high or low. They have priests of their own. The remarriage of widows is permitted. The dead are usually buried in the sitting posture, and a *pandál* (booth) of

milk-hedge branches is erected over the grave. The people are flesh-eaters, and liquor is only nominally forbidden. Their usual title is Chetti.

Sáles.

Sáles are a class of Telugu weavers, the name being derived from Sanskrit *Sálika*, a weaver. It is said, however, that some of them speak a corrupt form of Malayálam. They claim to be the descendants of the sage *Mrikanda*, the weaver of the Gods. The most important sub-divisions of the caste are Padma Sále and Pattu Sále. Many of them are Lingáyats and follow the customs of that sect.

Patvégárs.

Patvégárs are a Canarese caste of silk-weavers. They are Hindus and worship both Siva and Vishnu, but their special deity is Durga-paramésvari at Barkúr. They wear the sacred thread and employ Brahmin for ceremonial purposes. They are governed by a body called 'the ten men' and pay allegiance to the *guru* of the Rámachandra math. They are divided into *balis* and a man may not marry within his own *bali*. Polygamy is allowed only when a wife is barren or suffers from some incurable disease like leprosy. The girls are married in infancy and the binding portion of the ceremony is *dháre*. Widow marriage is not permitted and divorce is allowed only in the case of an adulterous wife. They follow the ordinary Hindu law of inheritance. The dead are cremated. The *Srádha* ceremony is in use, and the Mahálaya ceremony for the propitiation of ancestors in general is performed annually. Female ancestors are also worshipped every year at a ceremony called *Vaddap*, when meals are given to married women. They eat fish but not meat, and the use of alcohol is not permitted.

Bilimaggas.

Bilimaggas are a weaver caste of Tulu origin. They speak a corrupt dialect of Tulu called *Poromba*. Nominally Hindus, they are in reality, like most Tulu people, worshippers of *bhútas* or devils. The affairs of the caste are managed by a body of headmen, known as *Nalillaldakkul*, who have power to inflict fines up to 8 annas. These fines are paid to the *bhúta* of the village. The caste is divided into *balis* of the usual exogamous character. Their sexual relation is somewhat lax, and divorce is freely permitted. It is said that a widow may not marry her deceased husband's elder brother, but she may marry the younger. The use of liquor, flesh and fish is permitted. The caste name means 'a loom.'

OIL-PRESSERS —Gánigas.

Gánigas are the oil-pressers of the Canarese people, corresponding to the Telugu Gándla and the Tamil Vániyan. This caste is sub-divided into three sections, none of whom eat together or intermarry. These sections are the Heggánigas, who yoke two oxen to a stone oil-mill; Kirgánigas, who make oil in wooden mills;

CHAP. IV. OIL-PRESSERS. Gánigas.

and Ontiyeddu Gánigas, who yoke only one animal to the mill. They are collectively known as Jótipans or Jótinagarams. They are said to have originally come from the Mysore State. In addition to pressing oil, they also make palm-leaf umbrellas, cultivate lands and work as labourers. They employ Brahmins to perform their ceremonies. Their *guru* is the head of the Vyásaráya math at Ánegundi. Early marriage is practised. Widow remarriage is not allowed. They eat fish, mutton and fowls, but do not drink liquor. *Chetti* is their title.

POTTERS—Kumbáras.

The **Kumbáras** of South Canara seem to be a branch of the Telugu and Canarese potter castes, but many of them have Tulu for their home speech and follow the Aliya Santana rule of inheritance. Some of them officiate as pújáris in the temples of the local deities or demons and are employed to perform funeral rites. Unlike the Tamil potters the Kumbáras do not wear the sacred thread. Infant and widow marriages are very common. On the birth of a child the family observe pollution for 15 days, and on the sixteenth day the village barber and dhóbi get holy water from the village temple and purify the family by sprinkling it on their head. There are two endogamous sub-divisions, the Kannada Kumbára and the Tulu Kumbára, and each of these is divided into exogamous *balis*. Their ordinary title is *Handa*, which is also sometimes used as the name of the caste.

FISHERMEN.

The great bulk of the fishermen of Canara are Mogérs, of Tulu origin, speaking Tulu and following the Aliya Santana rule of inheritance; but towards the north they speak Canarese and have abandoned their distinctive Tulu customs. The Mukkuvans are the corresponding Malayáli caste in the south of the district. The Khárvis are of Maráthi and the Boyas of Telugu origin. All the fishermen, except the Khárvis, are also employed as palanquin-bearers. Many Moplahs and Native Christians are also boatmen and fishermen.

Khárvis.

Khárvis are, as said above, Maráthi fishermen who migrated to this district from the Bombay Presidency. The name Khárvi is said to be a corrupt form of the Sanskrit *Kshár*, salt. They are hard-working, but thriftless and much given to drink, chiefly toddy. They are sea-fishermen and good sailors, and also work as domestic servants and labourers. They employ Havík Brahmins to perform their marriage and other ceremonies. The head of the Sringéri math is their spiritual teacher.

Mogérs.

Mogérs are the Tulu fishermen, but those in the north generally speak Canarese and some at least of those dwelling in the Kásaragód taluk have adopted Malayálam as their vernacular. All, however, follow the Aliya Santana rule of inheritance and

Mogérs.

the habits and customs of all except the Canarese-speaking section are essentially Tulu. The latter have adopted some of the usages of the people among whom they dwell, and the following remarks do not apply in their entirety to them. The Mogérs are taller, fairer and more enterprising than other fishermen of the district. They are Vaishnavites and pay particular reverence to Venkatramana of Tirupati. Every year they make money offerings to him before eating their new rice, and they have an annual dinner or feast in his honour. But their special deity (or demon) is Mastimma. They employ their own *pújáris* or *belchapadas* for religious and ceremonial purposes. Bennekudru, near Barkúr, is considered to be the head-quarters of the caste and the temple there is greatly resorted to. The caste is divided into exogamous septs called *baris* or *baḷis*. Marriage takes place after girls are grown up and sexual license before marriage is tolerated. The form of marriage differs somewhat from that generally in use among Tuluva castes. The bride and bridegroom sit in a *pandál* (booth) and join hands, palms uppermost. Upon their hands the maternal uncle of the bride places first some rice, next five betel-leaves, then an unhusked areca-nut and last of all a lighted wick. The bridal pair slowly lower their hands and deposit all these things on the ground. The bride's maternal uncle then takes the bride by the hand and formally makes her over to the maternal uncle of the bridegroom. The payment of Rs. 4 by each party for the benefit of the caste deity closes the ceremony. The marriage of widows is permitted, but a woman may not marry any member of her deceased husband's family. Divorce is freely permitted. If a man wishes to dissolve his marriage, he has only to go to the maternal uncle of his wife, tell him that he has divorced her, strike three blows on a tree and pay him the modest sum of Rs. 1-4-0. Divorced women may of course marry again. The dead are buried, and on the seventh, ninth or eleventh day after death a ceremony called *Sávu* is performed. On the fortieth day after death another ceremony is performed for the purpose of introducing the soul of the departed to the shades of the sixteen ancestors immediately preceding him. They drink freely and eat fish and all kinds of flesh except beef, monkeys, crocodiles and vermin. They may fish in rivers and tanks as well as in the sea. They have no distinctive title.

Mukkuvans.

Mukkuvans are a Malayálam caste and follow the Marumakkatayam law of inheritance, which is the same as the Aliya Santana. They are divided into four exogamous septs or *illams*, called *Ponnillam*, *Chembillam*, *Kachillam* and *Karillam*. There is an hereditary headman of the caste, called the *Ayathen*, who settles disputes. For trifling faults the ordinary punishment is to direct

CHAP. IV. FISHERMEN. Mukkuvans.

the culprit to supply so much oil for lights to be burnt before the caste demon. They use the *táli* in their marriage ceremonies, and it is tied on the bride's neck by a near female relative of the bridegroom, who remains outside the house while this is being done. In the case of the marriage of widows, however, a round ornament, somewhat like a brooch, called *padakam*, is substituted for the *táli*. A widow may not marry into the family of her deceased husband. Divorce is permitted on payment of Rs. 2 in the case of men and Rs. 4 in the case of women to the temple of the caste deity.

WASHERMEN.

Washermen are returned under the following eight caste names: Agasa, Dhóbi, Madivála, Nekkára, Pariyáta, Rajaka, Vannán and Veluttédan. These, however, are for the most part the word meaning 'washerman' in different languages. Thus *Agasa* is Canarese, *Madivála* is both Canarese and Tulu, *Dhóbi* is Hindustani, Konkani and Maráthi, *Pariyáta* appears to be a corruption of the Maráthi *Parít*,[11] *Rajaka* is Sanskrit and *Vannán* is Tamil and Malayálam. The Veluttédans claim to be Náyars and wash only for the higher castes. Among the Malayálam Vannáns it is the women only who wash clothes; the men are devil-dancers. This is also the case among the Nekkáras.

Agasas.

Agasas are the washermen caste of the Canarese. The word *Agasa* is derived from *agasi*, a turban. They seldom follow any other profession than that of washing, and are said to worship the steam issuing from the pot of boiling water in which dirty clothes are steeped. They employ Havík and Shivalli Brahmins to perform their ceremonies. Infant marriage is practised; widow marriage is forbidden, but polygamy is allowed and practised. The rich burn and the poor bury the dead.

Madiválas.

Madivalas, as already stated, are the washermen of the Tulu people. The name of the caste is derived from *madi*, a clean cloth. Caste affairs are settled by headmen called Illadayas. They are worshippers of Bhútas and have their own priests, but Brahmins are employed to purify Bhútasthánas. They follow the Aliya Santana law of inheritance and have the usual exogamous *balis*. The marriage of girls in infancy is allowed, but is not compulsory. Sexual license before marriage is punished with a fine if discovered, but it does not involve expulsion from caste. The pouring of water over the joined hands of the bridal pair is the essential element in the marriage ceremony. Divorce is allowed at pleasure and nothing is paid. A widow may marry again. She may marry her late husband's younger brother, but she is not

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[11] Or Pariyáta may be a barber, for there seems to have been some confusion in the census returns between Pariyáta and Parivala; the latter is a washerman.

WASHERMEN. — Madiválas.

obliged to do so; in no case may she marry his elder brother. The use of alcohol, fish and flesh, except beef, monkeys and vermin, is allowed. Madiválas are somewhat lax in their sexual relations and the women are often kept as concubines by Bants.

BARBERS—Kelasi or Kshauraka.

Kelasis are Tulu barbers following the Aliya Santana law, but in the north they speak Canarese and follow the ordinary rule of inheritance. These people say they were originally Bants who took up the profession (*kelasi*) of barbers. They officiate as priests to the Bants and their presence is deemed necessary at three of the ceremonies observed by the higher class of Sudras. At the name-giving ceremony a Tulu barber has to tie the thread round the waist of the child and name it. Again, on the death of a high caste Sudra, the barber has to carry the fire to the cremation ground, though the funeral pyre is lit by the relations of the deceased. Thirdly, he is required for removing pollution in houses rendered impure by a death.

The Kelasis are, like the Bants, great worshippers of the Bhútas or demons. Brahmins are not employed as priests, but an elderly member of the caste, called the *Maryádaikáran*, officiates. In their observance of ceremonies they more or less follow the Bants. The marriage of girls takes place either before or after puberty, the essential condition of it being that the parties should belong to different *balis*. Widows are allowed, and, when young, encouraged, to remarry. The rich burn their dead and the poor bury them, but persons dying of infectious diseases are always buried. They will eat any flesh except beef, and they indulge freely in spirituous liquors.[12]

Ha áms.

Hajáms are Konkani Kelasis and therefore of Maráthi descent, but the name Hajám is used somewhat indiscriminately for all barbers. The true Hajáms are said to be immigrants from Goa. They employ Karádi or Havík Brahmins to perform their ceremonies, which are almost the same as those of Konkanashta Brahmins, but they eat flesh and marry their widows. They, as well as Kelasis, render service as surgeons and barbers.

TODDY-DRAWERS—Billavas.

Billavas or toddy-drawers are the numerically largest caste in the district and form close upon one-fifth of the total population. The derivation of the word Billava commonly accepted in the district is that it is a contraction of *Billinavaru*, 'bowmen,' and that the name was given as the men of that caste were formerly largely employed as bowmen by the ancient native rulers of the district. There is however no evidence whatever, direct or indirect,

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12 A good account of this caste is given in the *Christian College Magazine* for April 1894.

CHAP. IV. TODDY-DRAWERS. Billavas.

to show that the men of the toddy-drawing caste were in fact so employed.

It is well known that both before and after the Christian era there were invasions and occupations of the northern part of Ceylon by the races then inhabiting Southern India, and Malabar tradition tells that some of these Dravidians migrated again from Íṛam[13] or Ceylon northwards to Travancore and other parts of the west coast of India, bringing with them the cocoanut or southern tree (tenginamara) and being known as 'Tívars' (Islanders) or Íṛavars, which names have since been altered to Tíyars and Ilavars. This derivation would also explain the name 'Dívaru' or 'Halepaik Dívaru' borne by the same class of people in the northern part of the district and in North Canara. In Manjarabad above the ghauts, which, with Tuluva, was in olden days under the rule of the Humcha family, known later as the Bairasu Wodears of Kárakal, they are called 'Dévaru Makkalu,' literally God's children, but more likely a corruption of 'Tívaru Makkalu,' children of the Islanders. In support of this tradition Mr. Logan has pointed out[14] that in the list of exports from Malabar given in the Periplus in the first century A.D. no mention is made of the cocoanut. It was, however, mentioned by Cosmos Indico Pleustes (522 to 547 A.D.), and from the Syrian Christians' copper-plate grants, early in the ninth century, it appears that the Tíyans were at that time an organised guild of professional planters. Although the cocoanut tree may have been introduced by descendants of immigrants from Ceylon moving up the coast, the practice of planting and drawing toddy was no doubt taken up by the ordinary Tulu cultivators, and whatever the origin of the name Billava may be, they are an essentially Tulu class of people following the prevailing rule that property vests in females and devolves in the female line.

Many of the Billavas have the affix 'Baidya' or 'Pújári, added to their name, as a large number of them have been, and still are, 'Baidyas' or physicians, and 'Pújáris' or performers of 'púja' or worship in the 'Bhútasthháns' or demon temples. The Billavas also worship two deified members of their own caste, named Kóta Baidya and Chennaiya Baidya, to whom numerous temples are erected. They are not allowed to enter Hindu temples and when they wish to make offerings to these deities, they hand them to Bants who pass them on to the Brahmin priests.

The caste is divided into sixteen septs or *baḷis*, and some of these are again sub-divided into sub-septs. Intermarriage between

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[13] Dr. Caldwell derives Íṛam from the Sanskrit Simhala through the Pali Sihala by the omission of the initial 'S.'

[14] *Malabar Manual*, pp. 79, 143.

Billavas.

persons of the same *baḷi* is forbidden. These *baḷis* are said to be named after deceased ancestors. Girls are usually married after puberty. Sexual license before marriage within the caste is tolerated, but a woman who commits it is married by a different ceremony from that used for virgins. She is first married to a plantain tree and then the joining of hands ceremony takes place, but the pouring of water is omitted. Divorce is freely permitted, the only formality being the making of three cuts on a tree with a bill-hook and pronouncing the word *barapande* in the presence of the caste headmen. Widows may marry, but a widow who has children seldom does so. The dead are usually buried, but the *Gurikars*, or headmen of the caste, are cremated. The use of flesh and fish is allowed, but alcohol, though not interdicted, is rarely used. The home-speech of the Billavas is Tulu.

They still follow to a great extent the original profession of toddy-drawers and planters of cocoanut gardens, but a large number of them are ordinary agriculturists and labourers. As a rule, they are physically well favoured, both the men and the women, and are often very fair-complexioned. A few of them have entered Government service and risen to high office.

Halepaik.

Halepaiks are Canarese toddy-drawers and are found in the northern taluks of the district. The name is commonly derived from *hale*, old, and *páika*, a soldier, and it is said that they were formerly employed as soldiers. In some places they have altogether given up their hereditary occupation of toddy-drawing and taken to cultivation. In religion they profess to be Vaishnavites and employ Sátánis to perform their ceremonies; but, like the Billavas, they are mainly devil-worshippers. They are divided into *baḷis* and follow the Aliya Santana law of inheritance. Their girls are married either before or after they have attained maturity, but early marriage is the most common, and if a girl is married after puberty a fine of Rs. 4 has to be paid to the priest. The remarriage of widows is permitted, but a widow can marry only a widower. When no other husband is available for a girl, she is given in marriage to the son of her father's sister, even though he may be married already. The dead are generally burned. Some are vegetarians and others flesh-eaters; the consumption of liquor is permitted, but only very few indulge in it. Their home-speech is Canarese. Their ordinary titular affix is *Pújari*.

Tiyyans.

Tiyyans are the Malayálam toddy-drawing caste and a full description will be found in the *Malabar Manual*.

FIELD-LABOURERS—Holeyas.

Holeyas are the field labourers and former agrestic serfs of South Canara, Pulayan being the Malayálam and Paraiyan the Tamil form of the same word. The name is derived by Brahmins

CHAP. IV. FIELD-LABOURERS. Holeyas.

from *hole*, pollution, and by others from *hola*, land or soil, in recognition of the fact that, as in the case of the Paraiyan, there are customs remaining which seem to indicate that the Holeyas were once masters of the land; but whatever the derivation may be, it is no doubt the same as that of Paraiyan and Pulayan. Another name for the caste is *Kúsa*, but north of the Kalliánpur river that term includes many non-pariah castes. It is also a synonym for the Upper caste, the original occupation of which was the manufacture of salt (*uppu*). The Holeyas are divided into many sub-divisions, but the most important are Mári Holeya, Méra Holeya and Mundala or Bákuda Holeya. The Méra Holeyas are the most numerous and they follow the ordinary law of inheritance through males so far as that can be said to be possible with a class of people who have absolutely nothing to inherit. Of course, demon propitiation is practically the exclusive religious idea of the Holeyas, and every one of the above sub-divisions has four or five demons to which fowls, beaten rice, cocoanut and toddy are offered monthly and annually.

The Holeyas have, like other classes of South Canara, a number of *baḷis*, and persons of the same *baḷi* cannot intermarry. Though the marriage tie is as loose as is usual amongst the depressed and low castes of Southern India, their marriage ceremony is somewhat elaborate. The bridegroom's party goes to the bride's house on a fixed day with rice, betel-leaf and a few areca-nuts and waits the whole night outside the bride's hut, the bridegroom being seated on a mat specially made by the bride. On the next morning the bride is made to sit opposite the bridegroom, with a winnowing fan between them filled with betel-leaf, &c. Meanwhile the men and women present throw rice over the heads of the married couple. The bride then accompanies the bridegroom to his hut, carrying the mat with her. The marriage ceremony lasts for four days, during which time none of the party should fail to sit on the mat. On the last day the couple take the mat to a river or tank where fish may be found, dip the mat into the water and catch some fish, which they let go after kissing them. A grand feast completes the marriage. Divorce is easy, and widow marriage is freely practised. Holeyas will eat flesh including beef, and have no caste scruples regarding the consumption of spirituous liquor. Both men and women wear a small cap made of the leaf of the areca-palm.

Bákudas.

Bákudas,[15] though ordinarily classed as Holeyas, resent the application of that name to them and call themselves *Aipattukulada-*

[15] This account of the Bákudas was compiled from information received from the Udipi taluk. It is possible that it is not applicable to all Bákudas.

varu or 'the people of fifty families,' presumably from the fact that they are divided into fifty *baḷis* or families. These *baḷis* are said to be named after deceased female ancestors. Their special Bhúta is *Kambigára* and he is supposed to have come from Mysore. The Bákudas, too, speak a form of old Canarese, so possibly they are of Mysore origin. On the other hand, they follow the Aliya Santana law of the Tulu people. In addition to the caste demon each family worships a special demon of its own (*Kuttuchittari*). The head of the caste is called *Jammaniya* and he officiates as priest on religious and ceremonial occasions. The Bákudas are more strict about their sexual relations than the Holeyas and sexual license before marriage is viewed with disapproval. If the guilty pair belong to the same *baḷi*, they are turned out of the caste, but if this is not the case they are compelled to marry, the ceremony being the same as that used for widows, and the man must pay a fine. When a man is excommunicated he must perform a ceremony called *Yélu halli sudodu*, which means 'burning seven villages,' in order to re-enter the caste. For this ceremony seven small booths are built and bundles of grass are piled against them. The ex-communicated man has then to pass through these huts one after the other, and as he does so the headman sets fire to the grass. Bákudas will not eat beef or the flesh of jackals, monkeys, lizards, crocodiles, snakes, &c., but they will eat rats and pigs. They will not carry a bedstead unless the legs are first taken off, and it is said that this objection rests upon a supposed resemblance between the four-legged cot and the four-legged ox. Sheep and goats, however, are also four-footed animals and they eat the flesh of these freely when they can get it.

Bákudas.

LEATHER-WORKERS—Sámagáras.

Sámagáras are the principal caste of leather-workers; the Chakkilis, who are very few in number, are Tamils and the Mádigas Telugus. Sámagáras are divided into two endogamous groups, the Canarese Sámagáras and the Árya Sámagáras. The latter speak Maráthi. Though the Sámagáras are in general estimation as low a caste as the Holeyas and do not materially differ from them in their religious and other ceremonies and customs, they are, as a rule, of much fairer complexion, and the women are often very handsome. They employ Brahmin priests; early marriage is practised to some extent; widow marriage is permitted and the widow may marry her late husband's younger, but not his elder, brother. The dead are either burned or buried.

FOREST AND HILL TRIBES—Male Kudiyas.

Kudiyas or **Male-Kudiyas** are, as the second name implies, a hill tribe, but they are now found in both the plains and hills of South Canara. Their mother-tongue is Tulu and they follow the Aliya Santana law of inheritance. The Kudiya girls are usually

CHAP. IV. FOREST AND HILL TRIBES.

Male Kudiyas.

married after puberty, the usual bride price being Rs. 8 and a cloth. Husband or wife can divorce the other at pleasure and marry again, and the remarriage of widows is freely permitted. The dead are either burned or buried, the former being the custom in the case of rich men. On the seventh day after cremation or burial, a *pandál* is erected over the grave or the place of cremation and a bleached cloth is spread on it by the washerman ; a wick floating in half a cocoanut shell full of oil is then lighted and placed at each corner of the *pandál*. The relations of the deceased then gather round the place and weep and throw a handful of rice over the spot. They worship demons of the jungle named *Hakkerlu* and *Brahmerlu*, as well as the ordinary village demons called *Kodamanitáya* and *Nenjalanáya*, and make them offerings, twice a year, of fried and beaten rice and cocoanuts. These people are divided into clans each headed by a *Gurikára*, who is also called Malemudiya. When any important ceremony has to take place in any house, the presence of the *Gurikára* is deemed indispensable. If any one transgresses the caste rules, it is the duty of the *Gurikára* to inquire and punish him. The Kudiyas who inhabit the hills dwell in huts made of bark and reeds. Some of the Kudiyas living near Mangalore returned themselves as Savaras at the last census, as they objected to the ordinary caste name ; these Kudiyas are said to be Jains by religion.

Koragas.

Koraga is a forest tribe,[16] whose chief means of subsistence, however, is basket-making. It is perhaps owing to this fact and to the similarity of name that they have been said to be allied to the Koramas, Korachas, Koravas or Yerukalas, the well known gypsy tribe of basket-makers and salt-carriers. The tribal tradition is that a king called Habashika brought an army from Anantapur to Canara and the Koragar formed part of his forces. This army was at first victorious, but it was subsequently defeated and the Koragar were driven into the forests. While one form of this tradition describes the army as composed of Koragas, another speaks of it as an army of Holeyas, and it is probable that the two tribes were once closely connected though they are now distinct.

The Koragas are divided into three clans—the Ándé or Ada Koragas, Vastra Koragas, and Soppu or Soppina Koragas. Formerly the first mentioned were considered so unclean that they were not permitted to spit on the public way, but had a pot suspended from the neck which they used as a spittoon. The Vastra clan received as clothes the shrouds of the dead (*vastra*), while the

[16] The following account is based largely on an article on the Koragas in vol. iii. of *The Madras Christian College Magazine*.

Koragas.

Soppu clan is so called from their custom of wearing a dress of leaves. Another account gives the three sub-divisions as (1) *Kappada*, those who wear clothes, (2) *Tippi*, who wear ornaments made of the cocoanut-shell, and (3) *Vanti*, who wear a peculiar kind of large earring. These three clans may eat together but not intermarry. Each clan is divided into exogamous septs called *baḷis*, and it may be noted that some of the Koraga *baḷis*, such as *Haledennaya* and *Kumérdennaya* are also found among the Mári and Mundala Holeyas.

They are middle-sized, very dark and strongly made with slightly projecting jaws, high cheek bones and sloping foreheads. They cover the lower part of their body with a black cloth and the upper part with a white one, and their head-dress is a cap made of the areca-nut spathe, like that worn by the Holeyas. Their ornaments consist of brass earrings, an iron bracelet and beads of bone strung on a thread and tied round their waist. Females formerly used no clothing except a leaf apron, but they now tie a black cloth round their waist, leaving the bosom bare. They eat flesh, even that of cattle and wild animals, and always drink to excess.

They are much feared by the ordinary inhabitants of the district, who will not mention the word Koraga after night-fall, but use instead the expression 'the black-legged.' They were formerly slaves and in practice they still remain in a servile position, though of course legally free to take their labour where they please. Their condition is said to be fairly comfortable, as they receive liberal grain wages from their masters. In addition to basket-making, the Koragas are now employed as scavengers and drummers, and some collect the hides and horns of dead animals. The majority of them, however, are labourers.

The Koragas are worshippers of devils, especially of Panjurli; the festival celebrated in honour of that demon is called Tambílu. They have no priests, but the head of each family conducts all ceremonies. There is no fixed age for marriage and it may be celebrated at any time after a child is six months old. The ceremony is performed at the bridegroom's house, generally on a Sunday. The bridegroom and bride have to take a cold bath and they then seat themselves side by side on a mat with a handful of rice before them. The blessings of the sun are invoked and then an elderly man of the tribe takes up a few grains of rice and sprinkles them over the heads of the couple. His example is followed by the others present, first by the men and then by the women. The bridegroom has then to present two silver pieces to the bride and feasting and drinking conclude the ceremony. Widow marriage and polygamy are allowed and practised. The

CHAP. IV. FOREST AND HILL TRIBES. — Koragas.

dead are buried and never burned. On the sixteenth day after burial, a handful of earth is removed from the grave and buried in a pit and a stone is fixed over it. Some rice and toddy are placed on this stone as a last offering to the departed soul which is then asked to join its ancestors.

Social disputes are settled by their headman, who has power to call caste meetings. Serious offences are punished with loss of caste and minor transgressions by fines, the proceeds being spent on liquor. Though the punishment for adultery is excommunication, the offenders may be re-admitted into the caste after burning down seven small huts erected at their expense, into which the guilty persons were made to enter one after the other. This purification ceremony is also used by the Bákudas and has been described above.

Kudubis.

Kudubis number over 10,000 and possibly the real number is more than this, for they are sometimes called Maráthis. They are found chiefly in the Coondapoor taluk whither they appear to have migrated two centuries ago from the Marátha country. It is said that the tribe has three endogamous sections, viz., Goa Kudubi, Áre Kudubi and Jógi Kudubi. Each section is further divided into *wargs* or exogamous septs, such as, Ambalákar, Dondikar, Kanchalékar, Savant, &c. The head-quarters of the tribe are at Kana in the Mangalore taluk, where their *guru* resides. They shift their dwellings from place to place in the forests for the purpose of *kumari* cultivation, which consists in felling and burning the forest, cultivating the clearing for a few years and then passing on to another patch. The Goa sub-division, however, has taken to the regular settled cultivation of lands in the plains. In every village where these Kudubis dwell, there is a headman called *Gauda* who has authority to enquire into their tribal disputes and to impose and levy fines according to the gravity of the offence. They employ Joishi Brahmins during marriage and funeral ceremonies. They profess to be Saivites and worship Bhairava; but Bhútas are also worshipped when a Kudubi is afflicted with a virulent disease or any misfortune. Marriage before puberty is rare. Widow marriage is practised, but in its celebration *dháre* (pouring of water) is not performed. The dead are buried in a sitting posture, and no ceremonies are performed for the deceased except the distribution of rice to a few Brahmins. They eat fish and flesh except beef, and intoxicating liquors are freely taken. Their home-speech is a corrupt form of Maráthi. The Kádu Konkanis of the census tables are probably Kudubis.

CANE WORKERS— Nalkes.

Nalkes are a caste of mat, basket and umbrella makers and they furnish the devil-dancers, who play such an important part in the worship of the Tulu people. Their ordinary language is

Nalkes.

Tulu, but those who live in the north of the district speak Canarese, and all are said to follow the ordinary system of inheritance through males instead of the Aliya Santana law of the Tulu people. On the other hand, they have the usual Tulu exogamous sub-divisions or *balis*, and they seem to be of Tulu origin. It is possible that the information about their system of inheritance is incorrect. They are generally held to be Holeyas or Pariahs. In Canarese they are called Pánaras.

Pombadas.

Pombadas resemble the Nalkes, but they hold a somewhat higher position, and in devil-dances they represent a better class of demons.

Pánáns.

Pánáns are the Malayálam caste corresponding to the Nalkes and Pombadas. Their females act as midwives. They are numerous in Malabar, where they are also known by the name of Malayan. The devils whom they personify are supposed to have influence over crops, and at the time of harvest the Pánáns go about begging from house to house, dancing with umbrellas in their hands. On such occasions, however, it is only boys and girls who personify the demons.

Paravas.

Paravas are another caste of umbrella-makers and devil-dancers. They take rank above Nalkes and are somewhat numerous. It has been suggested that they are descendants of those Paravas who fled to the west coast from Tinnevelly in order to avoid the oppression of the Musalmáns.

Belleras.

Belleras are a somewhat higher caste of basket and mat makers and do not officiate at devil-dances. They speak a dialect of Canarese; a vocabulary is given in the second volume. They follow the Aliya Santana law, but divorce is not so easy as amongst most adherents of that rule of inheritance, and divorced women, it is said, may not marry again. Widows, however, may remarry. The dead are either burned or buried, and a feast called *Yede Besala* is given annually in the name of deceased ancestors. The use of alcohol and all flesh except beef is permitted. They make both grass and bamboo mats.

MISCELLANEOUS CLASSES.

Súles are professional prostitutes. They are lower in position than the Konkani **Kalávants**, who have been classed as dancers and singers, though, like all dancing girls, they are also courtezans. PATRAMÉLA is the name by which Kalávants are known above the ghauts. **Jógis** are mostly Telugu and Malayálam beggars, but the name is a general one and includes religious mendicants from all parts of India. **Maleyavas** have been classed as mendicants, as there is a small body of Malayálam gypsies of that name, but there may have been some confusion with Malava and Male-Kudya. **Dásaris** are Telugu or Canarese mendicants and are

CHAP. IV. MUHAMMADANS.

under a vow to the Tirupati God. **Kanisans** are Malabar astrologers. **Kotáris** are Canarese domestic servants.

Mappillas.

Mappillas or **Moplahs** are the most important class of Muhammadans in the district. They have spread northward from Malabar, and consequently are found in the greatest numbers in the southern coast taluks.

The origin of the name is given by Mr. Logan [17] as follows: "The word Mappilla is a contraction of *maha* (great) and *pilla* "(child), honorary title, as amongst Náyars in Travancore, and it "was probably a title of honour conferred on the early Muhamma-"dan immigrants."

From the seventh century onwards it is well known that Persian and Arab traders settled in large numbers at the different ports on the western coast of India and married women of the country, and these settlements were especially large and important in Malabar where from a very early time it seems to have been the policy to afford every encouragement to traders at the ports. The last King or Emperor of Malabar Chéramán Perumál, embraced Muhammadanism and visited Arabia about 825 A.D., after which he proposed to return to his own country and propagate the faith, but died before he could accomplish his purpose. He, however, gave letters of recommendation to his friends, who some years afterwards visited the coast and built mosques at several places amongst which are mentioned Mangalore, Barkúr and Kásaragód.[18] In Malabar the Mappillas have attained to large numbers partly from natural causes and partly from conversions. A somewhat similar state of things is to be found in the division of South Canara adjoining Malabar and, taking the Kásaragód taluk as a whole, about one-fifth of the population are Muhammadans, of whom the great bulk are Mappillas. The Mangalore taluk comes next with about one-tenth of the population, but amongst these there is a larger admixture of Muhammadans who are not Mappillas.

In Malabar the Mappillas have at times caused anxiety of a political kind, but this has never been the case in Canara, and, on the whole, they are a hard-working, steady and generally well-behaved class of people engaged mainly as agriculturists or as boat-men or bandy-drivers. The narrowness of their religious instruction has prevented them availing themselves of the advantages of western education to any extent, but they are very careful to teach the Koran to all their children. They usually marry only

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17 Logan's *Malabar*, i. p. 191 (Note).

18 Logan's *Malabar*, i. 192–196.

Mappillas.

one wife, and allow their women, who do not wear veils, a good deal of freedom which at the same time they take care shall not be abused. They speak Malayálam in the south of the district and farther north Tulu.

Other Muhammadans.

About the middle of the fourteenth century Ibn Batuta visited Mangalore and found in it about 4,000 Muhammadan merchants of Persia and Yemen. In 1514 Barbosa wrote that Mangalore was peopled with Moors and Gentiles, and described the trade of Basrur with Ormuz, Aden and Xeher, and when in 1526 the Portuguese took possession of Mangalore, the only opposition they met with was from the Muhammadan merchants of the place. The Muhammadan trade was practically killed by the Portuguese, but descendants of the traders are to be found amongst the Muhammadan population, and in the Coondapoor taluk there are a certain number known as **Naváyats**, whose head-quarters are in North Canara and whose traditions state that their ancestors fled from the Persian Gulf about the close of the seventh century to escape the cruelty of a Governor of Iran. The rest of the Muhammadans of South Canara are mainly what are known as **Daknis** who have spread downwards from Northern India and intermarried with the women of the country. They are mainly agriculturists or employed as peons or messengers in Government or private service.

At the ports, and especially in Mangalore, there are a number of **Mémans**, Muhammadan traders from Bombay.

CHRISTIANS.

Christians.—Though the Christians in South Canara do not amount to much more than one-twentieth of the total population, they form, owing to their wealth, intelligence and position, a very important section of the community.

Tradition ascribes a very early date to the introduction of Christianity to certain parts of the west coast of India, and the presence of a Roman force at Mouziris in the third century A.D. deprives the tradition of improbability. As regards the form of Christianity, the late Dr. Burnell was of opinion that the earliest Christian settlements in India were Persian, and probably, therefore, Manichæan or Gnostic, the more orthodox Nestorians not appearing earlier than the eleventh or twelfth century A.D. The earliest mention of Christianity, at a place which may have been in Canara, is in the writings of Cosmos Indico Pleustes, who visited the coast about 522 A.D. and mentions the existence of a Persian Bishop at Kalliána, which is ordinarily understood to be Kaliánpúr near Udipi, and owing to certain apparent points of resemblance to Christian precepts, suggestions have been made that the teaching of the Hindu reformer Mádhavácharya was affected by the

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Christian influences prevailing so near to his birth-place, Udipi, which is still one of the head-quarters of the sect founded by him. However this may be, no tradition now remains among the natives of Canara of a Christian community existing north of Malabar prior to the advent of the Portuguese, who made themselves masters of Mangalore and the other coast ports, about 1526 A.D., during Lopes Vas de Sampayo's tenure of office as Viceroy of Goa.

Roman Catholics.

Wherever the Portuguese went in these days they made the grant of facilities for the spread of the Christian faith one of the articles of the first importance in all treaties which they entered into with native chiefs, and consequently the rise of Portuguese influence on the coast of Canara was promptly followed by the preaching of Franciscan friars and the establishment of a mission, which is said to have been in a flourishing condition when visited about 1600 A.D. by Alexis Menezes, Archbishop of Goa, on his way back from Malabar, where he had been deputed by the Pope in connection with the attempts then being made to bring the Syrian church of that place under the authority of Rome. The fortunes of the mission naturally varied with the predominance or otherwise of Portuguese influence, and it was almost abandoned towards the close of the first half of the seventeenth century, the only priests left outside Mangalore being a few natives appointed by the Archbishop of Goa, towards whom the Bednore Government does not seem to have felt the same distrust as it did towards European clergy. When Della Valle visited Mangalore in 1623 A.D. he found a church in the Portuguese fort and two outside it, but there were only three European ecclesiastics, the vicar and two Franciscan friars. Shortly afterwards the Portuguese relations with the Bednore family began to improve, and the number of Christians in Canara was also much increased by immigrants from the country around Goa, who had fled to escape the distress caused by the ravages of the Mahrattas, and who found a congenial home in Canara with its comparatively strong Government and never failing monsoon.

By treaties executed in 1714 between the Portuguese and Baswappa Naick, Rája of Bednore, considerable powers and privileges were secured for the Christian priests; for instance the Vicar of Mangalore and the Superintendent of the Factory were jointly made judges in all disputes within factory limits between Christians and 'Infidels,' and outside factory limits the priests at any port or other place were to be the judges; no objection was to be raised to the building of churches wherever there were Christians, and priests on tour were not to be called on to pay ferry fees. The relations between the Christians and Hydar Ali of Mysore were at first satisfactory, and in 1769 he entered into an

Roman Catholics.

arrangement with the Portuguese Government, allowing the continuance of the Portuguese factory at Mangalore, and engaging that there should be no hindrance to conversions, and the priests should continue to enjoy full liberty and exercise jurisdiction over Christians according to the old custom. Shortly afterwards he suspected the Christians of assisting the English, but they were able to convince him that this was not the case. Tippu, however, was more of a fanatic, and after the conclusion of the siege of Mangalore in 1784, he commenced a relentless persecution of the Canara Christians. From motives of policy he seems to have been satisfied with ordering the priests out of the kingdom, but he determined on deporting all the converts to Mysore, and in one night he seized, according to his own statement, no less than 60,000 out of the 80,000 then estimated as the Christian population of Canara, and marched them off to Seringapatam, where only a limited number arrived, a large proportion having succumbed to the terrible privations they had to undergo on the way. After arrival at Seringapatam orders were issued for their forcible conversion to Islam, and the most barbarous tortures were inflicted on these who held fast to their faith. Some of the most able-bodied men were drafted into the army, and the remainder, with the women and children, were distributed throughout different villages in Mysore. The property of all the Christians in Canara was confiscated and their churches razed to the ground, those who escaped deportation having in the meantime fled to Malabar and Coorg, where they remained till the annexation of Canara by the British in 1799, when they returned along with the survivors of those who had been deported, their numbers in all being estimated at 12,000. Petitions to Government for the restoration of the confiscated lands were not acceded to in cases in which the British Government had found the lands in the peaceful occupation of others, but it was not long before the Christian community was in a fair way to recover its former prosperity. Great enthusiasm prevailed and all vied with one another in endeavouring to help on the work of rebuilding the churches by contributing money, labour or material. According to the amount of assistance given the founders were styled Mukhtesars, Gurkars and Lonvados and their representatives continue to enjoy certain honours on the day of the feast of the patron Saint.

There is a Roman Catholic church in almost every place of importance in the district.

The jurisdiction of the Archbishop of Goa continued down to the year 1837, when a portion of the community withdrew from it and placed themselves under the Carmelite Vicar-Apostolic of Verapoly in Malabar. In 1845 a separate Vicariate Apostolic was

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constituted for Mangalore, and in 1878 the Jesuits took the place of the Carmelites. Under the ecclesiastical hierarchy recently established for India by Pope Leo XIII. Mangalore is now the seat of a local Bishopric, and the Goa 'Padroado' is no longer known in South Canara.

An idea of the style of architecture prevailing in the Roman Catholic churches in Canara may be obtained from the following description given by Mr. Walhouse[19] of the church at Kaliánpúr: "Built in the same style as most of the Catholic edifices "in these regions with little regard to architectural pretensions, "huge barn-like body with a wide high-peaked pout rising over "the roof in lessening stages, whitewashed and adorned with a "large amount of plaster mouldings and cornices. From a dis- "tance this looks imposing, but nearer approach shows that it "is but a wall with nothing behind over the roof at least. The "front of the Kalliana church bears a huge image of the Virgin in "relief standing on a crescent moon, and an eagle with spread "wings overhead. The interior is quite plain, the area open with "an elaborate altar-piece at the end, ascending nearly to the roof, "ornamented in a peculiar but not ineffective manner, with "scrolls and wreaths of large free designs in various colours, sur- "rounding the Virgin and Child, accompanied by cherubim. On "each side of the chancel there is a highly decorated shrine, one to "St. Francis Xavier, the other to St. Peter with full papal robe "and tiara."

An account of a Passion-week service from the same article may also be quoted here: "It is a pretty sight on Sundays to "see the people attired in white, coming over hill and dale in long "lines and companies to the service, the women in spotless white "raiment with white wimples drawn over the head and shoulders. "They are often no darker than Italians and very pretty, their "glossy hair neatly braided and set with gold ornaments, for "flowers which with their heathen sisters delight to wreathe their "heads are forbidden them as specially connected with idolatry. "In some of the churches Passion plays are regularly acted at "Easter. On Good Friday evening the church is densely thronged "with a breathless congregation, a black curtain bearing a large "white cross hangs before the chancel arch, and a priest with "wondrous fluency and animation preaches from a pulpit in the "side wall. After a time the curtain is drawn aside, and a tall "black cross disclosed bearing a pale figure of life-size, the "countenance, side and limbs, streaked with blood, and looking

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[19] *Fraser's Magazine*, May 1875.

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"ghastly against a dark back-ground, on which a sun, moon and "stars are portrayed in gold tissue. At the foot of the cross there "is a large pile of green bushes, denoting the garden of Gethse-"mane. The preacher intensifies the earnestness of his address "pointing to the figure and going dramatically through all the "details of the tragedy. Presently, at the sides burst forth "flashes, explosions and loud wailings, the sun, moon and stars are "darkened by veils falling over them and the pile of bushes is "drawn away. The preacher stops and a long hymn is softly "sung. Then in at the church door a procession comes slowly "preceded by lights and crosses carrying two long ladders and a "white litter festooned with lace, and strings of over poweringly "sweet-scented Indian jessamine and tuberose. It advances to "the foot of the cross: the ladders are reared and men ascend, "the rails are slowly and reverently drawn out and long linen "bandages passed under the arms and round the body, during "which time hymns are sung. The body is then laid in the litter, "and all the congregation comes out of the church from which "in a few minutes the procession issues and passes slowly along "the streets inhabited by the Christian population which are "illuminated with rows of lamps, and then returns to the church."

To this day the Roman Catholics have not entirely shaken themselves free of the trammels of caste and they are still divided into classes of which Bammans or Brahmins, Cháródas or Kshatraiyas, Sudirs or Sudras, washermen and salt-makers are the most important. The Bammans and Cháródas are mainly of the same stock as the Konkani Brahmins who migrated into Canara from the neighbourhood of Goa and are described elsewhere. The others belong to the cultivating and labouring classes, and from the fact that Konkani is in most cases their home language as well as that of the Bammans and Cháródas, it is probable that their ancestors also came from the same place. The language of the common people, however, would, no doubt, be largely influenced by the language of their religious instructors. The principles of the Christian religion, and the assembly of all classes together, irrespective of caste, for public worship and for the reception of the sacrament, have done much to modify caste ideas, and that the distinction is rapidly becoming one of mere social signification is evidenced by the fact that intermarriages between members of the different castes are gradually becoming more frequent in cases in which members of castes other than the Bammans have succeeded in obtaining a good position in the official, legal, or commercial community. The Native Christians of the upper classes possess in a marked degree the fair complexions and handsome features which characterise the best specimens of the Konkani Brahmins,

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and owing probably to their more liberal diet the men are ordinarily more stalwart and the women less fragile looking. The cultivating and labouring classes are much like their Hindu neighbours.

All classes retain the Hindu dress, with the addition that the women, when going to church, wear a white mantle (*vól*) which is drawn over the head and covers the whole body. Those of the better classes also wear neat leather slippers and a fringe of lace round the 'vól.' Married women substitute for the Hindu 'táli,' a necklet from which is suspended a figure of the Infant Jesus made of gold in the case of those who can afford it. The women of all classes wear their cloth hanging like a petticoat nearly down to the ankle, the upper end being passed across the bosom and allowed to hang over the right shoulder.

The houses of the majority of the Native Christians do not differ materially from those of other natives. In towns they do not ordinarily live in streets but in detached houses with small gardens attached, and those of the more well-to-do members of the community are not unlike those occupied by the European residents.

They have all Portuguese names such as Saldanha, Brito, Mascarenhas, Vas, Coelho, Sequeira, derived from Portuguese sponsors, when their ancestors were baptised after conversion, but in some cases, especially in the rural districts, they also use their old native titles such as Prabhu, Naik, Shett, Pai, Padvál, &c.

In the same way as some relics of caste feelings still remain amongst them, their whole habit of life is in many ways still affected by survivals of old customs and modes of thought, though western ideas have made much more progress amongst the Canara Christians than amongst corresponding classes on the east coast. Many of them, especially amongst the women, cannot bear the idea of eating beef. Widow remarriage is not prohibited, but it is looked upon with much disfavour. A bridegroom of good position expects a large dowry with his bride, and many a man has been impoverished by being blessed with a large family of daughters. A wife never calls her husband by his name, and except among the more educated classes she is no more regarded as her husband's equal than is the case amongst other natives.

In 1801 Dr. Buchanan wrote of the Roman Catholic Christians of Canara that "their superior industry is more readily acknow-"ledged by the neighbouring Hindus than avowed by themselves," and they still preserve this characteristic in a marked degree. There is no walk of life in Canara in which some members of the comparatively small Christian community have not come to the front

rank, and they form no small proportion of the most prominent officers in every branch of the public service, as well as at the bar and in the mercantile world. Some of the poorer classes adopt handicrafts of various kinds, but they are mainly engaged in agriculture and many of them are very successful as market gardeners in Mangalore and the neighbourhood. One of the most important crops in these gardens is jessamine and other sweet-scented flowers, which are largely purchased by Brahmin women to wear in their hair. Of recent years considerable tracts of waste upland near the coast have been taken up by them and cultivated with chillies, ragi, hill rice, sweet potatoes and other crops of the kind.

Roman Catholics.

In the town of Mangalore full advantage is now taken of the facilities for education offered by the large college recently established by the Jesuits, but in other parts, except as regards female education, the Christians are not much ahead of their neighbours.

Protestants.

The Protestant Native Christians of South Canara are almost entirely the converts of the German Evangelical Mission of Basel, established at Mangalore in 1834. Their chief work in Canara has been carried on at Mangalore, but they have also somewhat important stations at Udipi and Múlki, and minor stations at Kárakal, Basrúr and Kásaragód. Their converts are mainly drawn from the Billava and other still lower classes and consequently they do not, as a body, occupy so good a social position as many of the Roman Catholic Christians, but they are hard working and well behaved, and in most cases their personal appearance, as well as the houses in which they live, indicates a fairly prosperous condition. The Mission, besides supplying good schools for all classes and creeds before either Government or other private enterprise had come into the field, has done much to teach handicrafts and industries to their people, and has established industrial branches designed to be "the helpmates of the clerical Mission by "assisting either those who have already joined the church, or "those who intend doing so, to learn to work, lead a regular life, "and cultivate thriftiness, so as to be able to earn their own bread "without being chargeable to others." The condition of the converts, who, it has been said, are drawn from the poorest classes, is a standing testimony to the wisdom of the measures adopted by the Mission.

JAINS.

There is every reason to believe that the Jain religion prevailed in Canara at a very early date, as we have it on the authority of the rock-cut inscriptions of Asóka of the third century B.C., that Buddhist or Jain principles had extended throughout the kingdom of Kéralaputra. Jainism is an offshoot of Buddhism,

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excommunicated at the second council, and such traces as have been found throughout Southern India indicate the prevalence of Jainism rather than Buddhism. The early Kadambas of Banavási and the Chálukyans, who succeeded the Pallavas as overlords of Tuluva, were undoubtedly Jains, and it is probable that the early Pallavas were the same, as a Jain temple at Palasika or Halsi in Belgaum seems to have been built by one of the family. The later Kadambas, who brought in the Brahmins about the middle of the eighth century, may or may not have been Jains at that time, for there is abundance of architectural and other evidence to show that early in the Christian era Jains, Shaivites and Vaishnavites lived and worshipped together on the most amicable terms, and even as late as between 970 and 1039 A.D. a Muhammadan writer called Al Baruni described the people of Malabar and Canara as being Samanies or Buddhists, by which, of course, Jains are meant. The Kollatiri princes of North Malabar were able to resist the invasions of the western Chálukyans and their feudatories from the north, and from that time there was apparently nothing to interfere with the growing predominance of Brahminism in Malabar, but in Canara a check seems to have been administered to the Brahmins by the practical transfer of the head-quarters of South India Jainism to Canara not long after the conversion of the Hoysal Ballál king Vishnuvardhana to Vaishnavism about 1137 A.D. The Bairasu Wodears of Kárakal, representatives of the old family of Patti Pombuchádripur or Humcha in the Nagar district of Mysore, had migrated into Tuluva after having, for several centuries, more or less effectually, exercised control over the district as underlords of the early Chálukyans, and were probably the Tulu kings who are mentioned in inscriptions as having been subdued by the Ballál king Vishnuvardhana and by the Kadamba feudatories of the later Chalukyans. This indicates periodical struggles for independence, and when the Ballál kings began building Vaishnavite temples in Mysore, many of the old Jain master-builders seem to have transferred their services to the Court of the Bairasu Wodears who had thrown off all allegiance to the Ballâls and become the strongest Jain power in Southern India. In the succeeding four centuries the Jain workers in stone, and those trained by them, scattered throughout the land enduring monuments of the Jain supremacy, and their adoption in most cases of the style of architecture, which even now is common in wood throughout all Malabar and Canara for religious edifices of all kinds, seems to indicate that on their arrival they found in use Jain places of worship built in a style which had been common when Jains and Brahmins were still on amicable terms with one another. The independence of the

Bairasu Wodears seems to have come to an end about 1336 A.D. when the Vijayanagar king Harihar Raya appointed a governor at Barkúr, but he recognised as feudatories the Bairasu Wodears of Kárakal and other local Jain chiefs. When the Vijayanagar power began to decline in the sixteenth century these again made a bid for independence, but were overcome by the Lingayat family of Ikkeri and Bednore who had obtained a grant of the provinces of Barkúr and Mangalore from the Vijayanagar kings. The struggle between the Lingayats and Jains seems to have been fiercest in the north, where the last representative of the Bairasu Wodears was in power as queen of Bhatcal, and by 1608 Venkatappa Naik had nearly extirpated the Jains in the province of Barkúr and had reduced to ruins all the Jain buildings in that city. Against the Jain chiefs in the Mangalore province, notably Choutar of Mudbidri, Bangar of Nandávar, Ajalar of Aldangadi, Múlar of Bailangadi and Savanta of Múlki, he was unable to make way so completely, and they retained some authority as feudatories until the time of Hyder and Tippu when they were deprived of their last vestiges of power; though representatives of their families still remain in the possession of a portion of their old private lands, and some are in the enjoyment of small pensions from the British Government. With the decadence of the political power of the Jains the faith of their adherents began also to wane. It never seems to have had any hold on the lower castes, and even the landowners, who belong to the Bant class, probably merely assumed it as a fashionable addition to the ancestral demon worship to which they all still adhere whether they profess to be Vaishnavites, Shaivites or Jains. The Jains of to-day are a small and quiet class numbering little more than 10,000 souls, residing mainly at Kárakal and Mudbidri, though they are to be found in small numbers in different parts of the Udipi, Mangalore and Uppinangadi taluks.

As above stated Jainism is a heretical offshoot of Buddhism and presents resemblances to both Brahminism and Buddhism which have been summarised as follows in Elphinstone's *History of India*: "They agree with the Buddhas in denying the existence, "or at least the activity and providence of God; in believing in "the eternity of matter, in the worship of deified saints, in their "scrupulous care of animal life and all the precautions which it "leads to, in disclaiming the divine authority of the védas, and "in having no sacrifices and no respect for fire.

"They agree with the Buddhists also in considering a state of "impassive abstraction as supreme felicity, and in all the doctrines "which they hold in common with the Hindus.

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"They agree with the Hindus in other points; such as division "of caste. This exists in full force in the south and west of India, "and can only be said to be dormant in the north-east, for, though "the Jains there do not acknowledge the four classes of the "Hindus, yet a Jain converted to the Hindu religion takes his "place in one of the castes, from which he must all along have "retained the proofs of his descent, and the Jains themselves have "numerous divisions of their own, the members of which are "strict in avoiding intermarriages and other intercourse as the four "classes of the Hindus.

"Though they reject the scriptural character of the védas, they "allow them great authority in all matters not at variance with "their religion. The principal objections to them are drawn from "the bloody sacrifices which they enjoin, and the loss of animal "life which burnt-offerings are liable (though undesignedly) to "occasion.

"They admit the whole of the Hindu gods and worship some of "them, though they consider them as entirely subordinate to their "own saints, who are, therefore, the proper objects of adoration."

The Jains of Canara belong to the Digambara, naked or sky-clad, division, and hence their images and statues are totally devoid of covering or ornament, but even their ascetics all now wear clothes except at meals. The objects of worship in the Jain bastis or temples are the twenty-four Tírthankaras or Siddhas, saints who have become gods, and to any one of whom besides his own special name or to all collectively may be given the name Jina, Jinéshwara, or Arhita. In the temple at Mudbidri prominence is given to Chandranátha, the eighth Tírthankara, but the colossal statues at Kárakal and Yénur are said to represent 'Gumta Ráya,' a mythical hero of whom nothing is really known, though there exists a 'Gumta Ráya Charitra' and the statue at Kárakal is said in an inscription to have been erected in 1432 A.D. (Saka 1353) to Bahubalin, son of Vrishaba, the first Tírthankara. The features of the statue are similar to those which are found on the images of Gautama Buddha almost all over the world, and the same features recur in all the representations of Tírthankaras in the different bastis. Once in sixty years there is a great festival at which Jains assemble from all parts and bathe the immense statue with cocoa-nut milk.[20]

The Jains of South Canara are divided into two main classes, Indras, and Jains or Jain Bants. The Indras are the priestly class and are divided into two classes 'Kannada Pújáris'

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[20] A further account of the Jain statues and temples is given in the chapter on Archæology.

and 'Tulu Pujáris,' the names indicating that the latter are indigenous, while the former are descended from immigrants from above the ghauts. Like Brahmins of all classes in Canara they follow the ordinary, and not the national, rule of inheritance. The other Jains are mainly of the same class as the Tulu Bant landholders and cultivators, but in the Uppinangadi taluk there is a section who speak Canarese and follow the ordinary and not the 'Aliya Santana' system of inheritance. These correspond to the 'Gauda' class of cultivators, of whom there are many in the Uppinangadi taluk. Several of the more well-to-do Jain Bants have taken to trade and money lending and acquired much property, and at the same time got into great disfavour amongst their neighbours, but the community, as a rule, are poor and inoffensive. Even the most well-to-do have failed to take advantage of the facilities now offered for education according to western ideas, and consequently there is not a single Jain amongst the officers of Government except as 'Potails' or heads of villages.

In their dress, customs and manner of life, the Jains differ but little from the Bants proper, except that they wear the sacred thread, abstain from animal food and spirituous liquors, and do not partake of food, except cakes and trifles of that kind, before sunrise or after sunset, and always carefully filter water in order, it is said, that they may not destroy the animalculæ in it. The marriage ceremonies and funeral obsequies are similar to those of the Bants, with the addition that the Jains perform 'abishékam' in their bastis or temples on the 16th day after death.

Their names and titles are in almost all cases the same as those in use amongst the Bants.

CHAPTER V.

AGRICULTURE AND TRADE.

Agricultural classes—Classification of land—Price of land—Mortgages—Landlords and tenants—Rents—Stock—Agricultural implements—Manure—Irrigation—Farm labourers—Products—Rice—Cocoanuts—Areca-nut or Betel-nut—Betel-leaf—Sugar-cane—Kumari—Hakkal—Wages—Weights and measures—Land measures—Divisions of time—Trade—Industries.

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Agricultural classes.

South Canara is essentially an agricultural district. About seventy-five per cent. of the working population obtain their livelihood by means of cultivation, and the majority of the unoccupied population subsist on incomes derived from the same source. All classes, castes and creeds are represented, the landowners being mainly Brahmins, Bants, Jains and Christians. The Bants, however, may be said to be the landowning and cultivating class *par excellence*, both on account of their numerical preponderance in that capacity, and their almost complete abstention from all other professions or occupations. The Havig Brahmins have devoted themselves mainly to the raising of areca-nut plantations, in the management of which they, and in some localities the Chitpávan Brahmins, seem to excel all others. Except in the neighbourhood of large towns, or where large extents of land are owned by religious corporations, landowners usually reside on their estates, and, whether the landowners are absent or not, the tenants have their houses on the holdings or on the waste land immediately adjoining, there being nothing in this district like the practice on the other coast of all the cultivators of a village residing on the common village-site. Forty acres is considered a large holding and five acres a small one. Tenures and natural circumstances being alike favourable, and the agricultural classes being generally industrious, a large number of the ryots are in easy and prosperous circumstances, and comfort is probably more widely diffused than in most other parts of Southern India.

A great part of the uncultivated waste consists of forest-clad hill land, but there is also a large extent of grass land, particularly on the upland laterite plateaus between the coast plain and the inland forests. Cultivation is carried on mainly in the valleys which are very fertile and specially adapted for rice crops.

Classification of land.

The principal division is into rice and garden lands, according to the crop for the cultivation of which the soil is best adapted. The rice lands are classified more with regard to the water-supply

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than to the nature of the soil, but as water brings silt with it, the lands, with the best water-supply, have also better soil than other lands in the same locality. The first class is called *bail* and comprises all the low-lying fields which are abundantly supplied with water, the direct annual rainfall being supplemented by water brought by channels from rivulets or streams, or raised from rivers by baling, or by picottahs. In some parts of South Canara, three rice crops, called, respectively, *yénelu* or *kártika*, *suggi*, and *kolake* are raised on the best land of the *bail* kind. In others it gives two crops of rice and one of dry grain. *Bail* producing three crops of rice a year is called *kolake gadde* (Canarese *gadde*, field) after the name of the third rice crop. The same kind of land giving two rice crops annually is called either merely *bail gadde* from the fact that the greater part of *bail* gives only two crops, or *suggi gadde* after the name of the second crop. Those *bail* fields which lie so low as to be submerged during the first few months of the monsoon are called *potla gadde* and yield, as a rule, only one rice crop after the rains are over, which, however, is a very abundant one.

Classification of land.

The *majal* or second class of rice land consists of those fields in the higher parts of the valleys which, though not entirely dependent on the annual rainfall, have yet a considerably smaller supply of water than those situated lower down. On the *majal* fields two crops of rice, or one of rice and another of some dry grain or pulse, are raised every year.

The third class of rice land is called *bett* and comprises those fields which are entirely dependent on the rainfall (*báne bett*, from 'báne,' a hill or grass land), and those which have a supply of water only sufficient to last during a short break in the monsoon. As the rainfall, however, is very abundant, one good crop of rice is usually obtained from the *bett* lands where the soil is not of a bad quality.

Garden land specially adapted for the formation of cocoanut and areca-nut plantations is called *bágáyet*.

Price of land.

The productive capacity of the land being extremely variable, it is not easy to fix on an average selling value for the different classes, and it is rendered more difficult by the fact that sale-transactions usually cover lands of different classes without separate prices being fixed for each. The largest selling price which has come under observation is Rs. 5,300 for 11⅓ acres giving an average of Rs. 481 per acre. On a rough average the selling price of ordinary *bett* land may be taken at from Rs. 20 to Rs. 25 per acre, *majal* from Rs. 25 to Rs. 100 and *bail* from Rs. 100 to Rs. 250, though the best *bail* land and good gardens will certainly fetch still higher prices.

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Mortgages.

Loans are freely given on the mortgage of landed property, the ordinary rate of interest being from twelve per cent. for small loans to six per cent. for large ones. Where more favourable terms are given, it is due either to the terms not being governed by business considerations, or to a designing money-lender offering favourable terms with the view of involving the borrower in difficulties, and ultimately becoming the owner of the land.

Landlords and tenants.

The proprietors or *wargdárs* either cultivate their lands themselves through their own labourers, or lease them out to tenants, who are broadly divided into two classes, *Múlgéni* and *Chálgéni*, according to the nature of their leases. The *Chálgénidárs* are mere tenants-at-will who, on condition of payment of an annual rent, obtain a yearly lease of land for purposes of cultivation. *Múlgénidars*, on the other hand, are tenants in perpetuity, who possess certain restricted saleable interests in the lands leased to them. There is also a third class of tenants called *Váidegénidárs*, whose lease lasts only for a specified term of years.[1]

Rents.

Rents, as a rule, are fixed at a high figure, but all landlords recognize the necessity of making remissions when tenants are in difficulties. This arrangement is better understood by the people, and possibly in a district of small estates where each landlord can know his tenants' circumstances thoroughly, better suited to their present moral and material condition than a uniform moderate rent for good and bad seasons alike. Except in cases in which a premium has been paid, or land has had to be improved by the tenants, or some other reason for favourable rates has existed, *múlgéni* rents are, as might be expected, higher than those paid by *Chálgénidárs*. The rents of rice lands are usually paid in kind, the money-value ordinarily ranging from Rs. 16 to Rs. 26 per acre for *bail* land, from Rs. 8 to Rs. 16 for *majal*, and from Rs. 2 to Rs. 8 for *bett*. Garden rents vary according to the condition of the gardens and frequently rise as high as Rs. 40 per acre.

Stock.

The ryots cultivate their lands by means of bullocks and buffaloes. The climate of South Canara is unfavourable to cattle, which are not bred in the district, except to a very limited extent. To the north of the district some of the ploughing cattle are obtained from the taluks of North Canara above the ghauts, but the importation is mainly from Mysore, and Subramanya in the Uppinangadi taluk is the great cattle mart of the district, about 50,000 head of cattle being annually brought down the Bisli Ghaut to a fair held just before the great festival at Subramanya which

[1] For a fuller account of these different kinds of tenures, see the chapter on Revenue History and Administration of the Land.

is held in December and is attended by ryots from all parts of the district. The price of an ordinary pair of bullocks is between 20 and 30 rupees, and that of an ordinary pair of male buffaloes from 30 to 40 rupees. Many of the large landholders among the Bants keep very fine racing buffaloes which are known as '*kambḷa kóṇagaḷu*.'

Agricultural implements.

The agricultural implements ordinarily used throughout the district and their cost are as follows :

	RS.	A.	P.
(1) Plough	1	8	0
(2) Yoke	1	0	0
(3) 'Muttu palai' or levelling board used before ploughing	1	8	0
(4) 'Marana nalli,' an instrument for levelling used in the Coondapoor taluk...	0	12	0
(5) 'Halke' or rake	1	0	0
(6) 'Kudanṭi' or wooden mallet for breaking clods of earth	0	4	0
(7) 'Kordu,' another instrument used for the same purpose in the Coondapoor taluk	0	8	0
(8) Mamoti	1	0	0
(9) 'Kodali' or axe	1	8	0
(10) 'Korgi' or seed drill used in the Coondapoor taluk	3	0	0
(11) Wooden thrashing frame	4	0	0
(12) Fork for tossing straw	0	6	0
(13) A wooden mallet used in making rice up into '*múras*' or packages of 84 lb. with straw coverings	0	4	0
(14) Sickle	1	4	0
(15) Bill-hook	1	8	0
(16) Fork for manure	1	0	0
(17) Rice-sifter	0	2	0
(18) Mortar for beating rice	1	8	0
(19) Cattle-trough	1	8	0
(20) Basket	0	3	0
(21) Knife	1	8	0
(22) 'Kaipalai' or instrument for gathering or strewing paddy	0	12	0

As may be inferred from the cost the instruments are of the rudest and most primitive description, but rude as they are they are not ill-adapted for the puddle cultivation of rice for which they are mainly required. Attempts by Government officers to

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introduce improved ploughs have not as yet met with much success.

Manure.

The manure commonly used all over the district is chiefly a compost of rotten leaves and the products of cattle. Ashes, when available, and *sudu mannu*, a mixture of loppings of trees, or twigs and leaves, or vegetable rubbish and dry earth burnt together, are also used very extensively, and in the inland tracts, where forest is still abundant, leaves and twigs are sometimes applied directly to the fields without either being burnt or mixed with animal products. The stubble is also ploughed in, that of the first crop being left 8 or 10 inches high for the purpose. For the preparation of cattle manure the floor of the shed, where the cattle are penned for the night, is strewed with branches and leaves, which are ordinarily allowed to remain there rotting in the urine and dung of the animals until the whole has been trampled into a pulpy mass. This process is simply a slovenly way of preparing what is generally regarded by European agriculturists as the best of all manures for ordinary agricultural purposes, but it is only a very limited number of the ryots who take the trouble to renew the top layer of bedding with sufficient frequency to prevent the sheds becoming extremely offensive. As matters are managed, the effect upon the cattle cannot but be injurious, and the ryots admit that it leads to continual attacks of foot-rot, but they find it pays them even to sacrifice their cattle for the manure thereby obtained. Near the coast it is a common practice for ryots to obtain as many cattle as possible from non-agricultural owners on condition of their being well fed and properly taken care of, and in such cases more attention is paid to the well-being of the animals. Wood-ashes are a very favourite manure and are used in a very thorough-going manner in the form of cultivation known as 'kumari,' in which standing forest is felled and burnt on the spot and seed sown in the ashes. Liberal privileges have been conceded to the ryots with regard to the use of leaves and loppings from the forests and all round cultivation a belt of 100 yards of land is left for the exclusive use of the adjoining cultivator for the supply of manure, fuel, pasturage and other domestic and agricultural aids. Such lands are known by the name of *kumaki* (assistance).[2] The manure used for rice lands is frequently burnt, but in gardens the ground round the foot of the trees is dug to a small depth and the pit covered over with earth after being filled with fresh leaves, those of the Strychnos nux-vomica being preferred for cocoanut trees. Salt is much valued as a manure for these trees. The duty on it

[2] For fuller information on this subject, see the chapter on the Revenue History.

renders its direct application impossible now, but it is supplied in the form of mud from the bottom of the tidal rivers, &c.

Irrigation.

The rainfall during the south-west monsoon being unfailing and abundant, there are no extensive irrigation works in South Canara. The rainfall alone is sufficient to ensure one crop even on lands where there are no facilities for storing water, while the streams and springs, which continue to flow for some time after the rain has ceased, enable the ryot to raise two or even three rice crops on the low-lying lands at the bottom of the valleys. For areca-nut plantations small tanks are usually made at the head of the valley in which the plantation is situated, and for the second and third rice crops, the cultivators are in the habit of damming up the water in the streams and the smaller rivers. Small anicuts of this kind are found in abundance all over the district though perhaps there are more in the Uppinangadi taluk and fewer in Kásaragód than elsewhere. For the annual construction of these dams a slight remission called *kattutar* was made long ago from the assessment. The amount was merely nominal and in no way represents the value of the labour annually expended on the works. Though nothing is spent directly by Government in connection with irrigation, numbers of small tanks supplied by springs and affording means of irrigation to different petty holdings are still considered Government property, but when the water goes all to one or two holdings, the tank is treated as attached to the holdings. Near the coast, where water is found near the surface, large numbers of small private tanks or reservoirs have been dug by private owners.

Where water for irrigation cannot be obtained by direct flow, it is raised by a variety of primitive contrivances according to the depth from which it has to be procured. Sometimes it is a matter of only a few inches, in which case it is ordinarily thrown up by means of a small wooden scoop held in the hand. When the depth is a little more, a somewhat larger scoop is suspended from a small tripod, and by this machine, which is called 'keidambe,' water can be raised by one man from a depth of about 3 feet. A more efficacious method, however, is to have two men to scoop the water up with a basket suspended on two ropes, one of which is held by each of the men. When the water is at a greater depth than 3 feet, a 'yátam' or 'picottah' is used, the lever being pulled down by men or women holding on to ropes and dropping into a pit, by the side of which there is an inclined plane, by means of which they walk up again to repeat their jump as soon as they have arrived at the top. The method prevailing on the eastern coast of working a picottah by means of a man walking up and down the lever is not in use here, and as there is very little

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cultivation from deep wells, the ordinary 'yátam' is a much smaller machine than the common Madras picottah. Large ones are to be seen occasionally, however, especially in the compounds of the houses of wealthy landholders, where it is used mainly for drawing water for domestic purposes.

Farm labourers.

Cultivation is carried on chiefly by means of *Kúliálugalu* or hired labourers, but there still remain some *Múladálugalu* or hereditary serfs. Most of the labourers employed on farms belong to the class known as Dhérs or Holeyas, and such of them as are not still considered as farm slaves or *Múlada Holeyas* come as a rule under the designation of '*Sálada Holeya*,' or a Holeya, who is bound to his master by a debt. Slavery of course is legally abolished, but custom dies hard, and notwithstanding the temptation of high wages offered by coffee planters above the ghauts, many of the old estate serfs or slaves acknowledge their ancestral master and do not care to leave his service so long as they are fairly treated according to the tradition of their class. The Jain and Brahmin farmers are especially dependent on their services. These labourers are paid in paddy or rice, and, especially in the case of *Sálada Holeyas* their wages are subject to deductions on account of debts contracted by them to meet the expenses of marriage, &c. For gathering the harvest and storing it up, hired labourers are not paid at so much per day, but receive a certain proportion of the produce of the harvest. So also for preparing rice from paddy they receive three seers of rice for preparing one *múra* of 42 seers. At the time of transplanting and reaping, females are largely employed and are generally paid at the rate of two seers per day. This subject is treated more fully under the head of wages.

Products.

The staple produce of South Canara is rice (*Oryza sativa*), which is cultivated in all the valleys of this well-watered district, as many as three crops being grown every year on a considerable portion of the low-lying lands. Next in importance comes the cocoanut, of which there are extensive plantations all along the coast line, and the areca-nut which is grown more inland and especially in the shaded valleys on the slopes of the ghauts, or the spurs which run down from them in all directions. The following figures from the latest statistical returns indicate the extent to which the different products of the district are cultivated :

	ACRES.
Rice (*Oryza sativa*).	473,680
Cocoanuts (*Cocos nucifera*)	24,894
Areca-nuts (*Areca catechu*)	9,246
Horse gram (*Dolichos biflorus*)	13,013
Black gram (*Phaseolus radiatus*)	10,993

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Products.

			ACRES.
Green gram (*Phaseolus mungo*)	...	...	9,786
Ragi (*Eleusine corocana*)	...	...	2,977
Gingelly (*Sesamum indicum*)	...	...	3,859
Pepper (*Piper nigrum*) ...	...	...	4,618
Cardamoms (*Elettaria cardamomum*)		...	1,063
Chillies (*Capsicum frutescens*)	...	...	1,073
Sugar-cane (*Saccharum officinarum*)		...	922
Tobacco (*Nicotiana tabacum*)	...	...	893
Betel-leaf (*Piper betel*) ...	...	...	600
Castor-oil (*Ricinus communis*)	...	...	369
Turmeric (*Curcuma longa*)	...	...	149
Cotton (*Gossypium indicum*)	...	...	139
Hemp (*Crotolaria juncea*)	...	...	78
Coffee (*Coffea arabica*) ...	...	...	98
Plantains (*Musa paradisiaca*)	...	...	44
Ginger (*Zingiber officinale*)	...	...	24

As this district has never been surveyed there is no accurate record of the extent under cultivation and the figures above given are consequently mere estimates. The total acreage shown also includes the second and third rice crops, and other crops grown in the cold weather on fields on which a rice crop had been grown during the monsoon. The cultivation of rice, cocoanuts, areca-nuts, betel-leaf and sugar-cane will be described in some detail further on. With regard to the other crops only a few passing remarks seem called for. The gram crops are grown mainly as a second crop on the *majal* rice fields, and in *kumari* and *hakkal* cultivation as will be explained hereafter. Ragi also is mainly grown in *kumari* and *hakkal*. Pepper and cardamoms are quasi-forest products, a certain amount being of spontaneous growth, which, however, is very trifling unless supplemented by planting and training creepers in the case of pepper, and partial clearing to let in light and air in the very moist and secluded spots in which alone cardamoms are to be found. The cultivation of pepper and cardamoms in areca-nut gardens is carried out to only a very limited extent in South Canara. Chillies, turmeric, gingelly and ginger are mainly *hakkal* crops. Tobacco is grown only to the south of the Kásaragód taluk. The crop requires careful watching and a liberal use of fish manure but pays well. The leaf is badly cured locally and is used mainly for snuff within the district, but a small quantity is made into cigars, and a little is exported to Bombay. Cotton is grown only in the Kásaragód *kumaris*. The only kind of hemp raised in the district on account of the fibre is the 'sunn' hemp (*Crotolaria juncea*), but a small amount of Indian hemp (*Cannabis sativa*) is grown in private gardens for the

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Products.

manufacture of bhang. Besides agricultural products most of the ordinary South Indian fruits thrive well in Canara. Pine-apples are particularly abundant and are of very fine quality when carefully cultivated. There are also some good grafts of mangoes in the district which have been largely extended of late years. All over the waste lands in the vicinity of the coast the cashew-nut tree (*Anacardium occidentale*) now abounds and is valued not only for the nut, but for the spirit which can be distilled from the apple at a trifling outlay. Besides cardamoms and pepper above alluded to, the minor products of the forests of Canara are numerous and abundant, the most important being myrabolans, shige-kai or the fruit of the *Acacia concinna*, cinnamon flowers, catechu, wild mace, wild nutmeg, and nux-vomica. The oil nut most largely grown in the district is of course the cocoanut, but gingelly and castor are grown to some extent, and a considerable quantity of lamp oil is also made from the seed of the Alexandrian laurel (*Calophyllum inophyllum*) which flourishes along the coast.

Rice.

As explained above, there are three main classes of rice lands, viz., *bail* or rich low-lying land, *majal* or middling land, and *bett* or rain-irrigated upland. The *yénelu* or *kártika* is the earliest rice crop of the season on whatever description of land grown. While[3] the Hindus in Canara mostly reckon their time by the moon, (Chándramána), the rice cultivators, for their purposes, prefer the solar year (Souramána). The Souramána year commences on the *Vishu* or *Mésha sankaramána*, when the sun is supposed to enter the sign of Aries. This day falls on the 12th of April of every year. April, therefore, is the month during which change of owners or tenants commonly takes place, and the preliminary operations for the cultivation of paddy-fields are commenced.

In anticipation of the setting in of the south-west monsoon, the cultivator commences work with ploughing the *bail* lands in the beginning of May, and laying aside every other concern which might interfere with the proper occupation of the season, he devotes his undivided attention to his rice fields, the produce of which constitutes by far the greater proportion of his annual profits. When the fields have been, in a certain measure, levelled, they are manured and by a second ploughing the manure is driven into the soil. The soil being thus laid open to the powerful rays of the sun, it becomes exceedingly dry and parched, whereby grubs and insects, and especially weeds, are destroyed. This done, the seed is sown in those fields where it is intended to prepare the nursery, if possible for the whole farm. The seed remains

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[3] From a paper on rice cultivation in South Canara by the Rev. H. A. Kaundinya in the Proceedings of the Board of Revenue, dated 9th November 1869, No. 869.

Rice.

in the ground, almost unchanged, awaiting the rains, when it germinates. This is called *hudi néji* (dry nursery). But if there is a tank or spring water sufficient for making the nursery before the monsoon sets in, the seed is sown about the middle of May and *watered.* This is called *nír néji* (water nursery). Where there is no such water obtainable and difficulties stand in the way of preparing a dry nursery, the cultivator sows the seed at the beginning of the monsoon, and makes what is also called *nír néji.* Of these three kinds, the nursery prepared with the help of tank or spring water, *before* the monsoon, or of old water, as the people call it, is considered the best and most remunerative. The 'dry nursery' is the second best, and often found equal to the above. But the nursery made at the commencement of the rainy season, with the help of the opening showers of the monsoon, is found to be decidedly inferior to the other two kinds. Thirty days after the appearance of the seedlings above the ground, the crop will be about a foot in height and fit for transplanting. During these thirty days, the rice fields, other than those set aside for the preparation of the nurseries are ploughed, manured and got ready for the reception of the young crop removed for transplantation from the nurseries. The work of transplanting is done from the middle of June to about the middle of July. Two months later—about the middle of September—the first crop or *yénelu* comes fully into ear and, within a month from that time, has ripened sufficiently to be in a fit condition for reaping. All this time rice fields are kept under water, which is allowed to stand in the fields about 2 inches deep. Care, however, is taken to drain off the water for a space of three or four days immediately after the seedlings have been transplanted, as also while the harvest is being reaped. In reaping the stalks are left standing to the height of 8 or 10 inches. These are ploughed up in the soil to serve as manure for the next crop.

As soon as the first crop is harvested, that is about the middle of October, the fields are again ploughed up for the *suggi* or second rice crop and fifteen days are allowed for the *yènelu* stalks to decay thoroughly, fresh manure being also added. Before sowing, the bundle of straw in which the seed of the second crop is tied up is immersed under water about a foot deep and pressed down by the weight of stones placed over it. After remaining in this position for about twelve hours, it is removed, and the following day, the seed is well mixed with thick cow-dung and water. The next day if nurseries are not used the seed is sown broadcast upon the fields, containing perhaps half an inch of water. The fourth day all the water is allowed to run out of the fields and for about four days immediately succeeding, the fields are left to stand dry. If any

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rain falls during this time, it is injurious to the rice crop. The nursery for the second crop is prepared in the same manner as for the first, only with this difference, that the one requires thick sowing and the other does not. If a nursery has been made, the seedlings are transplanted after the lapse of about four weeks from the time of sowing. The *suggi* crop is reaped in the early part of January and, in reaping, the stems are cut to within 3 inches of the ground.

The third rice crop or *kolake* is only grown on the best rice land with a large supply of water. Its cultivation commences immediately after the harvesting of the *suggi* or second crop. After ploughing, eight days suffice for the *suggi* stalks to decay, these having been cut down near to the ground, and being moreover much finer than those of the *yénelu* crop. The *kolake* is sown in January and reaped in the latter half of April.

The proportion that the yield of the second crop will bear to that of the first must naturally depend upon so many varying circumstances that no fixed proportion can be given. With some degree of approximation to the truth it may be said that, in general, the outturn of the second crop to that of the first is as two to three, or three to four, or even four to five, and, in certain exceptional cases, the one may be equal to the other, or even more than the first. The *suggi* rice is much inferior in quality to the *yénelu* rice which, being finer, is mostly reserved for exportation, while the former is used by the cultivators for home consumption.[4]

If a rice field capable of giving two crops is allowed to lie fallow and uncultivated after the first crop, it will harbour different kinds of noxious weeds which would not only eat away the strength of the manure still remaining in the soil, but would even deteriorate the land to such an extent as to throw a great deal of unnecessary labour on the cultivator when preparing his fields every year for his single crop. It is seldom, therefore, that the opportunity of raising a second crop is neglected even in unfavourable seasons. The different sorts of crops are not grown from seed of the same kind. The *yénelu* seed is of a species that will not do for *suggi* and *vice versâ*. On the other hand, *yénelu* seed may be used for *kolake* and *vice versâ*, but even in this case a cultivator will prefer a distinct kind of seed called *samage* for the *kolake* crop.

Where the fields contain saline matter in the soil, or where they are subject to the influence of sea water, the farmers in the

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[4] The ordinary outturn on *bail* land near the coast is said to be from nine to twenty-one fold, on *majal* ground from six to twelve fold and on *bett* from two to eight fold.

Rice.

southern parts of South Canara grow what is called *oguru dodda*, and another called *oguru kalame:* the former gives a very black rice and the latter, a tolerably white kind. These seeds are used in such places because, on account of the presence of saline matter, no other rice would grow well.

Whenever the ryot can afford it all rice lands are well manured, but naturally most attention is paid to the best lands, so that, as a matter of fact, comparatively, little manure is given to the *bett* fields. Very little manure is also given to a class of land called 'potla' which has not been noticed above, as it is only limited in extent. It is low-lying land which is submerged during the heavy part of the monsoon, and the silt deposited naturally upon it makes it possible to grow a very fine crop on it late in the year without the addition of much manure. The preference of transplantation to broadcast sowing is also mainly a question of expense, and consequently broadcast sowing is the rule as regards all the *bett* and a considerable portion of the *majal* land. For broadcast sowing the seed is always sprouted, except for a few exceptional soils, the most important exception being sandy tracts to the south of the Kásaragód taluk where dry seed is sown broadcast early in the season and left to germinate when the first showers fall.

In a few localities the paddy is trodden out of the ears by cattle, but thrashing is ordinarily performed by beating a handful of stalks against a wooden or bamboo grating through which the grains fall, after which they are collected and tied up in straw bundles called 'múras,' each bundle containing one *múra* or 42 seers of 80 tolas weight. All classes of rice are usually boiled before husking to such an extent that the husk bursts open after which the paddy is dried in the sun and then pounded. The better sorts when so prepared are called 'mascati,' owing, it is said, to large quantities of it having formerly been exported to Muscat. Rice husked without boiling is called 'beltige.' With a few exceptions all the finer grains grown in the *yénelu* and *kolake* crops are made into 'muscati,' but the very finest rices, such as the table rice used by Europeans and a few of the wealthier classes of natives, are husked unboiled. The coarse rice grown in the *suggi* crop and known as 'rási' is boiled before husking.

The principal varieties of rice are:

1. Jíra sále.	7. Ambatte.
2. Gandasále.	8. Doddare.
3. Menthesále.	9. Kinnibíja.
4. Sómasále.	10. Kayame.
5. Ajipasále.	11. Samunge.
6. Kalame.	12. Mundale.

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Rice.

13. Allige.	17. Sungal.
14. Dadde.	18. Vonthecare.
15. Kápikaje.	19. Kunderakutti.
16. Kudrubíja.	20. Thekkamboliari.

In this connection a custom of long standing is deserving of passing notice. Before reaping a crop, a tenant is bound to present his landlord with what is known as *bele-káṇike* (crop present). The shape assumed by the present differs according to the class to which the landlord belongs, a fowl being considered suitable in the case of a Christian or Muhammadan, while vegetables or fruit are offered to a Hindu. The landlord then takes the opportunity of looking up his account with the tenant and if there are any arrears an agreement has to be come to before the present is accepted, acceptance being an intimation that the reaping of the crop may be proceeded with.

Cocoanuts.

Cocoanut plantations extend along the whole coast line of South Canara in tolerably extensive plantations and scattered trees are grown on the banks of fields and in other favorable spots throughout nearly the whole district. Cocoanut trees are usually propagated from nuts which have not been plucked, but have been allowed to ripen and fall off from the tree, preference being always given to those with large eyes and grown on mature trees. They are allowed to lie out in the open air for some time until the liquid inside has been nearly absorbed by the kernel and then in the month of September, they are put down in moist ploughed ground with the tops above the surface. They usually sprout within three months and, after a year or two, according as the ground is soft or hard, they are transplanted in square pits 3 feet in width, 3 feet deep, and about 6 or 7 yards distant from one another. The seedling is planted at the bottom of the pit, which gradually gets filled up with mud in the course of three or four years. The manure used consists mainly of earth from the bottom of backwaters and consequently impregnated with salt, and the leaves of the nux-vomica tree. When the plants are young constant watering is required, but as plantations are usually formed only where the sub-soil water is near the surface, it can usually be discontinued after four or five years. On high lands, however, watering during a portion of the dry weather at any rate must be carried on so long as the tree lives. Trees come into bearing after five to twelve years, according to the nature of the soil, and continue in vigour until sixty after which they decay. In the low-lying islands in the backwater where cocoanut gardens thrive best, the seedlings are not transplanted into pits, but earth is raised round them. In a good cocoanut plantation about 120 trees are usually raised on an acre of ground and a tree in full bearing

ought to give fifty nuts annually. If tapped for toddy, an ordinary cocoanut tree is estimated to produce five bottles a day for the half year during which the tapping usually continues, and in favourable circumstances, and if the tree is specially cared for, this may be kept up throughout the whole year.

Areca-nut or betel-nut.

Areca-nut cultivation is carried on mainly near the ghauts in the deep narrow valleys in which there are perennial streams and abundance of shade and moisture, but gardens are also found nearer the coast in the glens on the sides of the laterite plateaus which rise to some 400 or 500 feet in height, and also on the sides of isolated hills which are found here and there in many parts of the district. Near Vittal in the Kásaragód taluk not more than 15 miles from the sea, and much farther from the line of ghauts, there are a number of these gardens producing areca-nuts which fetch a higher price than any grown in other parts of the district, with the exception of a small portion of the Coondapoor taluk which lies above the ghauts.

For planting purposes nuts are selected from the second crop of mature trees and are put down with the eyes uppermost in a well-moistened shady spot, the ends of the nuts being left visible above the surface of the ground. This is usually done early in February and daily watering is required until the monsoon has fairly set in, when the seedlings are transplanted to the neighbourhood of one of the small channels which run through every areca-nut plantation. They are left there for three years and are then finally retransplanted, each young tree being put down at the bottom of a pit 3 feet square and 3 feet deep, the pits being dug at a distance of 16 feet from each other in one direction and 8 feet apart in the other. A quantity of wood-ashes is first strewed at the bottom of the pits and, after the young trees have been put in, the roots are surrounded with fresh leaves and cattle manure. After these have come into full bearing, a similar number of young trees are planted between the old ones, and after these are well grown, a third set are planted. The distances between the trees being as above mentioned, the number planted each time would be at the rate of about 340 per acre, so that in an old plantation an acre would contain about 1,000 trees. The system of planting described above is that adopted by the cultivators in the neighbourhood of Vittal, where, as above said, the plantations are the finest to be found below the ghauts. In some places the method of cultivation differs somewhat from that described, and above the ghauts the trees are put down much closer than at Vittal.

An areca-nut tree begins to bear about ten years after its first, or seven years after its second planting. From its fiftieth year until its death, which happens between the seventieth and hundredth

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Areca-nut or betel-nut.

year, the fruit produced annually gradually diminishes, but the quality rather improves than otherwise. A tree in full bearing produces annually three bunches which ripen in succession between November and January. Each bunch contains from 30 to 100 nuts, so that 200 nuts may be taken as the average produce of an areca-nut tree in full vigour. The crop is sometimes plucked green between September and November, and the nuts are then boiled, cut into pieces and dried, the result being known by the name of *hûḷu aḍike*. Such of the nuts as are not plucked before November ripen on the tree and are gathered in December and January. These are called *biḷe gôtu*.

In most of the areca-nut plantations, pepper creepers and plantain trees are grown in addition to areca-nut trees, and of late coffee plants have also been introduced. The culture of the cardamom plant in such gardens is also common, especially in the Hannar Mágane of the Coondapoor taluk.

Betel-leaf.

The mode of cultivating the betel-leaf in South Canara has been well described by Buchanan in his "*Mysore, Canara and Malabar*," and, as his description is applicable even now, the following passage has been extracted from that work.[5]

"*Betel-leaf* (Piper betel) is here (South Canara) cultivated in "separate gardens, as is the case in most parts of India, except in "*Malabar*. For this purpose a red stony soil on the side of a "rising ground is preferred. Some of the gardens are watered "from tanks; others, by means of the *yátam*, from wells, in "which the water stands from 12 to 24 feet under the surface. "Between the 23rd of April and the 23rd of May the ground "is first dug, and is then formed into beds 6 cubits wide, which "are separated by trenches three-fourths of a cubit broad, and "half a cubit deep. In the centre of each trench, at four finger-"breadths from each other are planted, in rows, cuttings of the "betel-vine, each a cubit in length. If there is no rain, they "must be slightly watered five times a day, and then covered with "branches to keep off the sun. At the end of the first and second "months, a little fresh red soil, mixed with small stones, are "put in the bottoms of the trenches. At the end of the third "month a row of branches, at 6 or 8 cubits from each other, is "planted on each side of every trench. The branches are intended "to grow up to trees as supports to the vines. Those chosen are "the *songary* (Erythrina), the *nuriga* (Moringa), and the *agashay* "(Eschynomene grandiflora). At the same time, a little more "earth and some dung are put into the trenches. In the sixth "month more earth and dung is given; and *bamboos* having been

[5] Vol. iii. p. 54.

Betel-leaf.

"tied horizontally along the rows of branches, the young *betel-* "*vines* are tied up to these. At the same time, in the middle of "every second bed, a channel is formed, which every other day "is filled with water; and from thence, by means of *kaypallay*, "the water must be thrown on the plants. Every month, a little "dung and red earth is put to the roots of the vines, and these "are tied up to the *bamboos* and trees. When a year old, the "garden begins to produce leaves for sale; after which, once in "two months, it requires to be manured, and in dry weather to "be watered once in two days. In the centre of each of the beds "that have no channels is then put a row of plantain trees. "The garden is generally surrounded by a quickset hedge, at "other times by a dead hedge of prickly bushes, and in the inter- "val between the fence and vines are planted *capsicums* and other "kitchen stuffs. Every four years the *betel-vines* die; but in their "stead others are immediately planted, and a new trench being "dug in the situation of each old one. In eighteen or twenty years, "the soil having been exhausted, all that is near the trees is "removed, and in its place fresh red earth is brought into the "gardens. The trees last for fifty or sixty years; but when, by "accident, one dies sooner, a fresh branch is planted to supply its "loss. These substitutes, however, do not thrive. When from "old age, the whole trees begin to decay, the garden is abandoned, "and a new one is formed in another place."

Sugar-cane.

In South Canara four kinds of sugar-cane are cultivated—

(1) *Rastáli kabbu*, a green cane which is preferred for eating.

(2) *Dása kabbu*, a brown cane with yellow longitudinal stripes.

(3) *Kari kabba*, a dark-brown cane.

(4) *Bidiru kabbu*, a light green cane with long internodes not unlike a young bamboo whence it derives its name.

Alluvial soil suits all kinds best, but the fourth kind can be grown in a gravelly soil, and an admixture of sand is not bad for the first. The class of field called 'majal' which is considered the second best for rice is what is usually preferred for sugar-cane. The low-lying lands which produce three crops of rice seem to be too wet for sugar-cane at certain seasons of the year.

Between December and March the field chosen for the cultivation of sugar-cane is twice ploughed and once harrowed. This process is repeated five times. Trenches are then dug about 2 feet apart from each other, each trench being about 12 feet long and 1½ feet wide at the top and about 1 foot at the bottom. The earth at the bottom of the trench is then loosened with a pickaxe, and over this loosened earth, rubbish, dried leaves, &c., are heaped up

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Sugar-cane.

and burnt, and with the manure thus produced some burnt earth is mixed. Water is then let into the trenches and the cuttings are planted. The cuttings are each 1 or 1½ feet long, and before being planted they are immersed in water, or they are covered with straw which is constantly wetted, for three days, after which they are taken up and dried in the shade for twenty-four hours. The cuttings are placed horizontally along the trenches, the end of one cutting usually overlapping that of the other as far as the middle, but in some parts the cuttings do not overlap. In the case of the fourth kind of sugar-cane the cuttings are laid in three rows along the trenches. Earth from both sides of the trenches is thrown over the cuttings so as to cover them, and they are then watered. The cuttings sprout in about eight days and in about a month the canes are about 2 feet high. At this stage burnt earth mixed with ashes, powdered dung, or fish manure is used, and a layer of earth is spread over the manure. In the inland tracts a common manure is nux-vomica or emblic myrabolan leaves. Manuring is repeated every month or at least thrice before the setting in of the rains, and on the last occasion in which manure is put the trenches are filled up. When the rain begins ridges are raised to the height of about half a foot. Thirty tons of manure are said to be required for an acre of good sugar-cane.

After the planting of the cuttings the land is irrigated either daily, or on alternate days, or once in three or four days until the rain falls. In the monsoon months the growing sugar-cane requires little or no attention, and the canes are fit for the mill or market after from nine to twelve months from the time of planting.

Neither coarse nor refined sugar is made in the district. The juice obtained from sugar-cane passed through the common wooden mill of the district is put into large boilers, earthen or metal, and heated over the fire for about four hours, and when it thickens lime is added at the rate of 1 tola for 28 lbs. of juice. The juice is then poured into earthen or wooden vessels and stirred for sometime with a stick after which it is transferred to moulds, and turned out in the form of small cakes of jaggery.

Kumari.

As in all countries in which there is a large extent of forest waste, crops are raised in Canara by felling and burning patches of forest, the clearings thus made being singularly fertile owing to the ash manure and the abundance of *humus* always to be found in forest of any considerable age. In old days there seems to have been but two kinds of cultivation in Canara, the 'kumari,' or temporary cultivation of forest clearings on which the forest was again allowed to grow, and the rice cultivation in the permanent clearings in the valleys, and as a consequence even to this day the cultivation of dry crops on upland grass land is often

called 'kumari' by the people though it is officially termed 'hakkal,' and all forest has long since disappeared from the neighbourhood.

Kumari.

The nomadic form of kumari cultivation seems to have prevailed only to a small extent in Canara for many years, owing to the landholders of a village regarding themselves as the owners of the waste, as well as of their holdings, and demanding fees and perquisites and even regular rent from any one who cut 'kumari' in the village forests.

The early British Administrators seem to have accepted things as they found them, and kumari in Canara was divided into 'sirkar' kumari and 'warg' kumari, according as the kumari cutters paid dues direct to Government, or to landholders who paid to Government a small 'kumari' assessment. In course of time the rights of Government over the forests became better understood and restrictions were placed on the exactions of landholders in dealing with forest cultivators, and eventually, as attention was directed to the destructive effect on forest of allowing kumari cultivation to be carried on at all, orders were issued in 1860 remitting 'warg' kumari assessment and prohibiting 'sirkar' kumari cultivation except in such localities as the Collector considered it necessary to allow it to prevent great suffering amongst forest tribes who were unaccustomed to any other form of cultivation. An exception was also made with regard to 'warg' kumari in the Békal máganés of the Kásaragód taluk where it had become a firmly established practice, and kumaris were bought, sold and mortgaged as freely as any other holdings.

The following account of kumari, as practised in South Canara, appears in the Proceedings of the Board of Revenue, dated 16th April 1859:

"It is the name given to cultivation which takes place on forest "clearings. A hill side is always selected, on the slopes of which "a space is cleared at the end of the year. The wood is left to "dry till the following March or April and then burned; in moist "localities the seed is sown in the ashes on the fall of the first rain "without the soil being touched by implement of any kind, but "in the taluk of Békal the land is ploughed. The only further "operations are weeding and fencing. A small crop is taken off "the ground in the second year, and sometimes in the third, after "which the spot is deserted until the jungle is sufficiently high to "tempt the kumari cutter to renew the process."

In the 'warg' kumaris of the Békal máganés of Kásaragód the crop raised is usually rice mixed with dháll and cotton. Elsewhere rági and gram are the principal crops with a small

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amount of dháll, castor-oil, gingelly, chillies and vegetables of different sorts. After the restrictive orders of 1860 'sirkar' kumari was allowed only in the Coondapoor taluk, but a limited amount has recently been sanctioned under the regulation of the Forest Department in portions of the Uppinangadi and Kásaragód taluks, and it seems clear that in extensive forests the complete prohibition of kumari means the depopulation of the tract to such an extent that labourers cannot be found to collect minor forest produce and carry on other operations of forestry. [6]

Hakkal.

The cultivation of ordinary dry grain crops on land prepared by clearing brushwood or scrub jungle or grass is termed hakkal to distinguish it from kumari, but as above noted the term kumari is often applied by the people to any casual cultivation of upland waste. The crops and method are the same as in kumari except that more tillage is required, and where there is no brushwood, burnt earth or ash manure has to be brought and spread. With the increase of population, the rise in prices and the advance in knowledge as to what can be done with manure, 'hakkal' cultivation is not so completely left as formerly to the hill tribes or lowest classes of labourers, and in the neighbourhood of the coast, land hitherto left waste, or only occasionally cultivated, is now being permanently taken up for the same class of cultivation on an assessment of one rupee per acre or double the amount charged for casual 'hakkal.' The crops mainly grown are 'kumari' rice, rági, horse-gram, turmeric and chillies, the last being the most paying, but at the same time involving great labour and considerable outlay. Farm labourers frequently grow a small 'hakkal' crop on their own account on the 'kumaki' or waste land adjoining an estate, and on this no assessment is charged.

Wages.

As already stated the ordinary agricultural labourers of this district are Holeyas or Pariahs of two classes, known as 'Múlada Holeyas' and 'Sálada Holeyas,' the former being the old hereditary serfs attached to *múli wargs* (estates) and the latter labourers bound to their masters' service by being in debt to them. Now-a-days, however, there is little difference between the two classes. Neither are much given to changing masters, and though a 'Múlada Holeya' is no longer a slave, he is usually as much in debt as a 'Sálada Holeya,' and can only change when his new master takes the debt over. To these labourers cash payments are unknown, except occasionally in the case of 'Sálada Holeyas' where there is a nominal annual payment to be set off against interest on the debt. In other cases interest is foregone, one or other of the perquisites being sometimes docked as an equi-

[6] For Kumari assessment see chapter iii.

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Wages.

valent. The grain wage consists of rice or paddy, and the local seer used is on the average, as nearly as possible, one of 80 tolas. The daily rice payments to men, women and children vary as follows:

Men	..	..	from 1 seer to 2 seers.
Women	..	..	,, $\frac{2}{3}$,, to 2 ,,
Children	..	..	,, $\frac{3}{8}$,, to 1 seer.

The variations in the rates obtaining in the different parts of the district are determined by a variety of local causes but, speaking broadly, the rates are higher in the inland parts where population is comparatively sparse and the labourers are tempted to migrate to the coast or to coffee plantations above the ghauts. If money equivalents be looked to, it may be said that the rates are not higher as rice is there cheaper, but, as a matter of fact, the wages really are higher as the labourer gets more of what he wants and the landlord pays away a larger proportion of his produce. It is only in the Malayalam *máganés* in the south of the district that the minimum rates above given prevail, and even there higher rates are given at the time of harvesting, sowing, &c. For the district generally, the typical rates of daily wages may be taken as:

Men .. $1\frac{1}{2}$ seers rice and condiments = 1 anna 8 pies.
Women .. $1\frac{1}{4}$ seers rice and condiments = 1 anna 5 pies.
Children.. $\frac{1}{2}$ seer of boiled rice with condiments = 7 pies.

In addition to the daily wages and the midday meal of boiled rice which is given in almost all parts, there are annual perquisites or privileges. Except on the coast of the Mangalore taluk and in the Coondapoor taluk every family of Holeyas is allowed rent free from $\frac{1}{8}$ to $\frac{1}{3}$ acre of land and one or two cocoanut or palmyra trees with sometimes a jack or mango tree in addition. The money-value of the produce of this little allotment is variously estimated at from 1 to 5 rupees per annum. The average may be taken at Rs. 3, which shows that the most is not usually made of the allotment. Throughout the whole district cloths are given every year to each labourer, the money-value being estimated at 1 rupee per adult and 6 annas for a child. It is also customary to give a *cumbly* (blanket) in the neighbourhood of the ghauts where the damp and cold render a warm covering necessary. On three or four important festivals presents of rice and other eatables, oil and salt are given to each labourer, or, in some cases, to each family. The average value of these may be taken at 1 rupee per labourer, or Rs. 4 per family. Presents are also made on the occasion of a birth, marriage, or funeral, the value of which varies very much in individual cases.

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If an ordinary family be supposed to consist of a man and his wife and three children, of whom two are old enough to do a little work about the farm, the annual receipts of the household on the typical rates given above will be—

		RS.	A.	P.
1 man .. $1\frac{1}{2}$ seers rice and condiments	=	0	1	8
1 woman .. $1\frac{1}{4}$ seers rice and condiments	=	0	1	5
2 children .. 1 seer rice and condiments	=	0	1	2
$3\frac{3}{4}$ seers rice and condiments	=	0	4	3
365				365
$1,368\frac{3}{4}$ seers rice and condiments	=	96	15	3
Value of produce of land	=	3	0	0
Value of cloths ..	=	3	2	0
Value of presents on festivals	=	4	0	0
Total ..		107	1	3

The above calculation is based on the assumption that each member of the family has been fit for work every day of the year, but some allowance must be made for casual absence from sickness, when bare subsistence is provided, and in some cases not even that.

Whole families of Holeyas are attached to the farms, but when their master does not require their services he expects them to go and work elsewhere in places where such work is to be got. In the interior, outside work is not to be had at many seasons, and the master has to pay them even if there is not much for them to do, but, one way or another, he usually manages to keep them pretty well employed all the year round. In places where labour is scarce, farmers have to arrange to help each other with labourers. The great bulk of the farm labour of the district is done by the 'Múlada' and 'Sálada' Holeyas, but other permanently employed farm labourers are not unknown. They may be of any caste and the wages vary greatly. Some seem to be mere dependents, or relatives, of the farmer who reside in his house and get merely their meals and clothes. On the coast, where this class of labourers is most common, the daily wages vary from 2 to $2\frac{1}{2}$ seers of rice with, in some cases, condiments and an allowance for firewood. In many places a cloth is also given annually and, in the interior, they frequently get presents at festivals also. Speaking

of the district generally, the average money-value of the daily wages of these permanently employed farm labourers may be taken at from 2 to 2½ annas.

Wages.

For certain particular classes of work such as irrigating, building embankments, plucking cocoanuts or areca-nuts, husking paddy, &c., labourers are sometimes paid daily wages and sometimes by contract or piece-work. When paid by daily wages the amounts vary from 2 annas to 3 annas 4 pies. The following may be mentioned as specimens of the contract rates:

For irrigating.—In the Mangalore taluk, one múra of rice (42 seers) is given for irrigating one acre of land for one crop.

For building embankments.—For each 100 cubic yards of earthwork there is paid in some parts of the district, Rs. 4 in cash, one múra (42 seers) of rice (Rs. 2–8–0), condiments (As. 6–0), six cocoanuts (As. 3–0), three kudtas (1½ seers) of oil (As. 3–0)—Rs. 7–4–0 in all.

For plucking cocoanuts.—From two to five per cent of the cocoanuts plucked.

For plucking areca-nuts.—One pie per tree, or one per cent. of the areca-nuts plucked, or 4 annas for 100 bunches of areca-nuts.

For husking paddy.—Three seers of rice for every múra (42 seers) of rice obtained.

It is generally considered that an able-bodied adult can earn 3 annas a day in any of the above-mentioned ways, while some can earn even more.

The wages of unskilled labourers have not increased within the time for which we have records, but there has been a great rise in the price of skilled labour. Smiths and bricklayers, who in 1850 obtained 4 annas per day, now get 6 annas, and carpenters now receive 8 annas, who then got only 6 annas. Masons sometimes earn as much as 12 annas per day, as do also carpenters who are above the ordinary run of workmen of their class. The smiths and carpenters required for preparing agricultural implements are not employed by the day, but they have each a shop in every village to which the peasants take their work and pay so much in kind for each description of work.

The unskilled labour of the district has found a new outlet in the coffee estates on the Western Ghauts, which offer tempting rates of wages to coolies who are willing to work in them. The Holeyas have, more than any other class, availed themselves of the advantages presented by work in the coffee estates and migrated to them in large numbers.

Weights and measures.

In South Canara, as in other parts of the Presidency, weights and measures were until lately in an unsatisfactory state, owing partly to the want of a definite initial standard, and partly to the

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Weights and measures.

absence of any arrangements for the manufacture of measures of a uniform capacity.

From returns submitted in 1836 it appears that the grain measure called a seer was assumed to contain 78 tolas of rice in most parts of the district, but that the seer used at Coondapoor contained 80 tolas. In 1852 it was reported that the seer when struck was calculated to contain 78 rupees weight of rice or 80 rupees of mixed grains of nine varieties, but in the same letter it was stated that in Coondapoor and all taluks to the south of it—that is in the whole of the present district of South Canara, the seer might be assumed to contain when struck 80 rupees weight of grain. In a set of tests of measures in ordinary use at different stations in the district made in 1872 in connection with the preparation of a conversion table for the price returns, the capacities of the measures were found to vary from 79 to 83, and in another set of tests made in 1886, the variations were from 78 to 80½.

In January 1886 [7] the Board accepted the Collector's statement that the measures in use throughout the district contained approximately 80 tolas of rice and adopted this as the standard in the conversion tables.

In December 1884 an establishment for stamping weights and measures according to a prescribed standard was started experimentally in the Mangalore taluk, and another in the *Udipi taluk* in October 1886. These establishments work at times in the other taluks and as large numbers of weights and measures are being stamped by them, there is every reason to hope that uniformity and accuracy will soon prevail throughout the district.

The standards which are based on the rupee or tola of 180 English grains, and the seer of 80 tolas as above explained, are as follows:

Grain measures (struck)—

Pávu or ¼ seer	equal to 20 tolas.
½ seer	equal to 40 ,,
Seer	equal to 80 ,,
Kalsi	equal to 14 seers.

Liquid measures—

½ kudte	equal to 6 tolas of distilled water.
Kudte	equal to 12 ,,
Kutti	equal to 9⅓ kudtes.
½ maund	equal to 5 kutties.
Maund	equal to 10 ,,

Weights—

¼ seer	equal to 6 tolas.
½ seer	equal to 12 ,,

[7] Proceedings, dated 1st January 1886, No. 63, para. 21.

Weights and measures.

Weights—cont.

Seer	equal to 24	tolas.
¼ rátal	equal to 10	,,
½ rátal	equal to 20	,,
Rátal	equal to 40	,,
¼ maund	equal to 7	rátals.
½ maund	equal to 14	,,
Maund	equal to 28	,,

Though the above standards suit all the ordinary requirements, there are some cases in which a particular article of produce has a special measure of its own; thus a maund of jaggery consists of 40 seers only.

The weights used in weighing gold are—

4 rice grains or vîssa	equal to 1 guriginja or hága.
2 guriginjas	equal to 1 manjatti or adda.
2 manjatties	equal to 1 hana.
9 hanas	equal to 1 pagoda or varáha túk.
3 pagodas and 3¾ hanas	equal to 1 tola or rupee.

Land measures.

It has been the practice of the country to estimate the area of a portion of land by what is called 'Bíjawari,' viz., the quantity of seed required to sow it. This quantity varies with the quality of the land and the variations of the local seed measure, so that great diversity exists.

Several experiments were made by actual measurement to obtain such an average as may represent in defined terms what is meant by a *moody* or extent of land requiring a *moody* of 60 seer measures (of 80 tolas' weight in rice) of seed to sow it. In the 'bail' or in the best low level land, the average *moody* was found to be 0·912 acres. In 'majal' land it averaged 1·072 acres, and in the 'bett' high level land 1·116 acres, so that one acre may be assumed as a very rough average equivalent of the *moody*. In some places the *moody* is 56, 50, 48, 45, 40 and 35 seers and in those localities the corresponding quantity of land is of course less than an acre.

Lands measured under orders of the revenue authorities have however been measured in acres and *goontas* or fortieths, as in Bellary, except in the case of some very old grants.

Divisions of time.

Amongst the natives of South Canara both the solar (sauramána) and luni-solar (chándramána) calendars are in common use. The Sáliváhana era is adopted for both; but the name-years of the Brihaspatichakra or Jovian cycle are only used in connection with the months of the luni-solar system. The solar year begins about the 12th April, and the luni-solar year on the new moon immediately preceding the beginning of the solar year; but the name-year of the cycle is used for both. That the solar system

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Divisions of time.

was the one in earliest use in Canara may be inferred from the fact that there are Tulu names for the solar, but not for the luni-solar months, thus—

Sanskrit.	*Tulu.*
Mésha.	Paggu.
Vrishabha.	Besha.
Mithuna.	Kártél.
Karkataca.	Áte.
Sinha.	Sóna.
Kanya.	Nirnala.
Tulá.	Bóntel.
Vrischika.	Járde.
Dhanus.	Perárde.
Makara.	Puyintél.
Kumbha.	Máyi.
Mína.	Suggi.

The solar system enters rarely into documents, but solar days are given conjointly with lunar ones in horoscopes and other astrological writings. It furnishes dates for no festivals except New Year's Day, the birth of Krishna and Upákarma and certain festival days peculiar to special temples such as the 'Pariyáya' at Udipi and the Kollúr festival. All the operations of cultivation are regulated by the months of the solar system which alone are well known by the cultivating classes, especially in Tuluva proper, but leases, which are always written in Canarese and usually by Brahmins, are dated according to the lunar system though the date of payment of rent is entered according to the solar system, doubtless owing to its being more familiar to the rent-paying classes.

For the lunar months there are no Tulu nor even Canarese names, the Sanskrit terms being used, viz. :

1. Chaitra.	7. Ashwija.
2. Vaishákha.	8. Kártika.
3. Jyéshta.	9. Márgashira.
4. Áshháda.	10. Pushya.
5. Shravana.	11. Mágha.
6. Bhádrapada.	12. Phálguna.

As these are strictly lunar months, and not artificial ones as seem to be the Tamil months having the same names, an extra one has to be intercalated every third year under the name of 'adheka' prefixed to one of the other months as the case may be. This luni-solar system governs as above stated all ordinary religious festivals and observances and is the one ordinarily quoted in documents. In the five southern or Malayalam *máganés*

a Malayalam solar system is in general use with an era called 'Kollam' divided into cycles of 1,000 years.

Divisions of time.

The lunar month is divided into the bright and dark fortnights, called Shuddha or Shukla and Bahula or Krishna, which are sub-divided into 15 'tithis' or days varying in length from about 21 to 24 hours.

The solar system has weeks of seven days corresponding to the English week and the day and night are each divided into 4 jámas of 3 English hours or 7½ 'ghaligas,' each 'ghaliga' being 24 English minutes. A ghaliga is divided into 60 'vighaligas' of 24 English seconds.

The year is also divided into six 'rutus' or seasons as follows:

Vasanta (shining)	Chaitra. Vaishákha.
Gríshma (hot)	Jyéshta. Ásháda.
Varsha (rain)	Shrávana. Bhádrapada.
Sharad (sultry)	Áshwija. Kártika.
Haimanta (cold)	Márgashira. Pushya.
Shishira (dew)	Mágha. Phalguna.

These are quoted in religious services and prayers, but are not much regarded by the cultivating classes who have a local division—

Bésigála (hot)—March, April and May.
Malegála (rainy season)—June to October.
Chalikála (cold season)—November to February.

Trade.

The trade of the west coast of India is frequently alluded to by Greek and Roman writers, but none of the existing ports of Canara can be identified with any of those mentioned. As stated in the chapter on the history of the district, suggestions have been made which, on fuller investigation, have turned out to be erroneous. These have been replaced by new suggestions even more fanciful, and as they are even less likely than their predecessors to stand enquiry, it is unnecessary to discuss them. It may, however, be regarded as certain that South Canara shared in the ancient trade with the west, either directly from its own ports or by means of interportal trade with the large emporiums.

As an indication of the extreme antiquity of the trade between Egypt and India, it may be mentioned that mummies from Egyptian tombs, fully 4,000 years old, have been found wrapped in Indian muslin, but it cannot be said with certainty that these

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reached Egypt by sea from west coast ports. The Phœnician trade however (980 B.C.) between Tyre and India was unquestionably by sea, and the cinnamon and cassia, as well as the apes, peacocks and ivory mentioned in the Bible as imported by King Solomon are common west coast products. In the first century of our era the author of the Periplus states that the Egyptians exported woollen and linen cloth, wine and bullion to India, and received in return spices, gems, silk, pepper, ivory, cotton, betel and tortoise shell. Some of all these, except gems, silk and cotton, very probably came from Canara.

Trade between Canara and Arabia must have existed from very early days, as Arab traders were actually establishing themselves on the west coast in the fourth and fifth centuries A.D. A trade in horses between Persia and Ceylon, which no doubt extended to the west coast of India, is mentioned by Kosmos Indikopleustes in the sixth century, and the Malabar coast is described in *Sindbad the Sailor* and the *Voyage of two Muhammadans*, both of which were written about the ninth century A.D. After the arrival of the Portuguese a long struggle for trade supremacy took place between them and the Muhammadans which culminated in the entire success of the former, who, however, had in their turn to give way, first to some extent to the Dutch and afterwards completely to the English.

In the present day the most important articles of export trade are coffee, rice and paddy, areca-nuts, bricks and tiles, sandalwood, oils, cardamoms, salt-fish, hides and horns, and tobacco; and amongst imports the principal articles are cotton piece-goods, twist and yarn, kerosine oil, salt, copper and copperware, copra, oils, agricultural implements, sugar and tobacco. The coffee exported at Mangalore is grown in Mysore and Coorg, whence it is brought to Mangalore where there are several firms engaged in curing it. That exported to foreign ports chiefly goes to England, but a certain proportion goes to France and a comparatively small amount to Persia and Arabia. There is also a large exportation to Bombay, and to other ports in India the bulk of the latter being taken to ports in Malabar to be cured there for foreign markets. The shipments to Bombay are mainly on account of convenient direct freight to foreign ports not being at the time obtainable. The coffee trade of South Canara is confined to the port of Mangalore.

Rice is the staple crop of the district and after the wants of the people have been fully supplied, a large surplus remains for exportation. Though this article of export comes second to coffee in point of value, it of course far exceeds it in quantity. More than half of the exports go to Malabar, about one-third to

Trade.

Goa, and only a small quantity to foreign countries such as Arabia or Zanzibar. Exports go from all the ports of the district, but the rice trade with Goa is chiefly carried on at Hungarkatta, and with Persia, Arabia and Zanzibar at Coondapoor (Gongoli), and Mangalore.

Next in importance come the exports of areca-nuts, all the produce of this district. The foreign trade is chiefly to Kathiawar and Cutch, and the bulk of the remainder goes to Bombay. A large trade in bricks and tiles is carried on with Bombay consisting mainly of machine-made tiles, of which the Basel Mission has two large factories at Mangalore. There are also one European and several native firms engaged in the manufacture on the pattern introduced by the Basel Mission about twenty-five years ago.

Sandalwood is exported in large quantities to Bombay. It is all grown in Mysore and Coorg and brought down for shipment chiefly from Mangalore and Udipi.

Sandalwood oil is manufactured in the Udipi taluk from sandalwood brought down from Mysore and Coorg, and the exports of essential oils consist mainly of sandalwood oils, but there is also some cinnamon oil manufactured mainly in Mysore. All but a small portion of the exports go to Bombay whence much of them find their way to China.

Coir yarn is manufactured to a large extent on the Laccadive Islands as well as on the mainland, and is exported from the port of Mangalore to Bombay and Calcutta. Cardamoms are grown to some extent in the district, one very large plantation being at Neriya near Beltangadi in the Uppinangadi taluk, but the most of those which leave the Canara ports come from Mysore and Coorg; more than half go to Bombay, about a third to England and small quantities to France, Arabia, Persia and Zanzibar.

The salt-fish industry is rapidly extending in South Canara, but a great deal of it is in the hands of adventurous fishermen from Ratnagiri, who make large hauls off the Canara coast and bring them in to the nearest fish-curing yards. About a third of the exports go to Ceylon and the remainder to other ports in India.

Hides and horns are exported mostly to Bombay.

The exports of tobacco are mainly interportal, the tobacco grown in the Kásaragód taluk being in much demand for snuff all over the district. Amongst minor articles of export may be mentioned books and printed matter, copra, pepper, piece-goods, turmeric and shark-fins.

Imports from England rarely come direct to Mangalore or other Canara ports, and the few ordinary direct imports from foreign countries are coal, beer and machinery from England,

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kerosene oil from New York, dates from Persia, and salted fish from Arabia and the Persian Gulf. Amongst imports from all ports cotton piece-goods take by a long way the first place, followed by salt, copper and copperware, areca-nut, tobacco, kerosene oil, twist and yarn copra, and gram, after which in small quantities come sugar, pulse, agricultural implements, and umbrellas. Almost all the piece-goods are used in the district, salt and kerosene oil being the only imported articles of which a large proportion merely passes through to Mysore and Coorg. Three-fourths of the whole sea-borne trade, which may be valued at nearly 150 lakhs, is carried on at the port of Mangalore, which is the only one visited by the weekly steamers of the British India Company. The ports of Coondapoor (Gongoli), Barkúr (Hangarkatta) and Udipi (Malpe) have each about one-tenth of the trade of Mangalore; Mulky has from a third to a half of the trade carried on at these latter, and Kásaragód, Kumbla and Manjéshwar have from one to two lakhs. At Baindúr, the most northern port of the district, the trade is under a lakh.

As above stated, Mangalore is visited weekly in fine weather by the British India Company's coasting steamers, and by those of Sheppard's line, and three or four steamers call every year to take coffee direct to Europe. In addition to this there is an occasional call from some other steamer or large sailing vessel. The trade at the other ports and the remainder of the trade at Mangalore is carried on by means of 'buggalows' from Arabia and the Persian Gulf with a capacity of from 30 to 50 tons, and country craft commonly called pattimars and machwas with an average capacity of about 20 tons, the machwas being, as a rule, smaller than the pattimars. About 2,000 of these vessels enter annually at the port of Mangalore, and from 500 to 1,000 at each of the larger ports above mentioned.

The statistics relating to the external land trade are incomplete, as they have been kept only on the routes leading to the Native State of Mysore. It is known, however, that the imports from Coorg are mainly coffee and cardamoms, while the exports are similar in quantity and kind to those by any one of the main roads to the southern districts of Mysore.

The imports of coffee, sandalwood, cardamoms, rice and cinnamon oil merely pass through South Canara for export. Of the articles of import by land for the use of the people of South Canara, the most important are Indian piece-goods, and cattle which are brought down annually to a great cattle mart at the time of the festival held every November at the temple of Subramanyam near the foot of the Bisli Ghaut. The remaining items are jaggery, chillies, oil and other seeds and tobacco.

Among the exports by land of articles which are the produce of the district the most important items are cocoanuts, cocoanut oil, gums, resins and tiles.

Trade.

Transport of through traffic in the case of bulky goods is usually by boat as far as water way is available and after that by cart. Valuable goods are usually carried by cart alone. Until within the last few years almost all through traffic was carried in Mysore carts, but of late there has been a great increase in the number of carts kept in Canara, and these now get a fair share of the work. Pack bullocks still bring down a certain amount of grain from above the ghauts, especially in the two northern taluks, but their use is being gradually abandoned. They may, however, continue for some years yet in the Coondapoor taluk where the communications above the ghauts have not been opened out so well as farther south and the forest tracts come much closer to the sea.

The facilities for internal trade are considerable, there being nearly 900 miles of made road suitable for cart traffic, besides village roads, and 170 miles of water carriage open the whole year round. Twenty-five years ago there was hardly a cart in Canara, except on two or three of the main lines of road, and all traffic elsewhere was conveyed by pack bullocks or coolies. Now carts are abundant throughout the district, and their number is rapidly increasing. They are kept by all classes, but it is chiefly Mussulmáns who lay themselves out as regular carriers. South of the Udipi taluk the boatmen are almost all Mápillas, and in Udipi and Coondapoor Christians, or Hindus of the fisherman caste.

The Konkani Brahmins are the trading and shop-keeping class of Canara and in the most out-of-the-way spots the Konkani village shop is to be found. In the Kásaragód taluk, however, the Mápillas have to a great extent taken their place, and all over the southern part of the district roadside shops are found kept by Mápillas as frequently as by Konkanis. In the towns and important villages other castes secure a larger share of the shops and warehouses, and the Christian traders and shopkeepers are numerous and pushing, especially in Mangalore and the neighbourhood. Throughout the district the ordinary requisites of life are to be found in the village shops. Cloths are procured once a year, as a rule, from the town or at one of the large annual festivals or fairs, of which there are a good many at different places in the district. Cattle, except for the most northern parts of the district, are almost all obtained at the cattle market near Subramanya at the time of the annual festival at the temple of that place in November.

Salted or sun-dried fish is hawked throughout the whole district by women of the fisher caste who barter it for paddy with

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which they return to the coast. Betel-leaves are somewhat similarly distributed by the growers of that article of universal use.

Industries.

In the year 1800 Sir Thomas Munro wrote as follows: "Canara "will probably never be a manufacturing country, because it "produced none of the raw materials necessary to render it such "and because the heavy rains which last so great a part of the "year are an insurmountable obstacle to all operations which "require to be carried on under a clear sky and the open air."

These words remain true to the present day as regards indigenous effort, but the Basel missionaries have recently shown what good use can be made of the clay with which Canara seems to be specially favoured. Factories for the manufacture of bricks and tiles have been started by the Mission and by other at Mangalore, Udipi and Coondapoor which meet not only a constant local demand, but export largely to Bombay and other places on the coast, and also by road inland to Mysore and even to Ootacamund. They are also experimenting with white clay in the hope of eventually being able to produce porcelain.

The native weaving is of the most ordinary kind. Blacksmith's work is exceptionally poor, pottery is fair, and the goldsmith's work is perhaps above the average, as might be expected in a community which is distinctly prosperous. Besides introducing tile factories which afford employment to considerable numbers, the Basel Missionaries have endeavoured to promote the material prosperity of the people amongst whom they work by starting printing presses, book-binding establishments, weaving factories and mechanical workshops, the last on so large a scale that they were able to undertake contracts for the erection of large iron bridges for the Local Fund Board. Many of the natives who received their training in the Mission establishments are now carrying on a business of their own independently. Another important industry, which has of late years been brought about by the introduction of foreign capital, is coffee curing, in which two European firms are now engaged besides one very large and some minor native houses of business. Coir rope of a very good quality is made in the Laccadive Islands and to a small extent throughout the coast.

GLOSSARY OF SPECIAL VERNACULAR TERMS.

Adavu .. .. Simple mortgage.

Anadi banjar .. Immemorial waste.

Angirasa chitta .. See 'Durmati chitta.'

Arvar .. .. Mortgage of land with possession.

Bagayat .. .. (1) Cocoanut or areca-nut gardens; (2) land specially adapted for such gardens.

Bane .. .. See 'Kumaki.'

Banjar .. .. Waste land.

Bail .. .. Low-lying land of good quality, capable of producing annually three crops of rice or two crops of rice and one of some other grain or pulse, or two crops of rice both of which can be raised without recourse to artificial means of irrigation.

Berizu .. .. Assessment.

Bett or Bettu .. Land capable of producing one crop of rice annually (called dry land in accounts).

Bharti .. .. Full. When a 'warg' or estate is able to pay the full Tharao assessment, it is called a Bharti warg.

Bhogyadi adavu .. Mortgage of land with possession.

Bijawari .. .. Amount of seed required to sow rice land, in old accounts. In Canara, there is no record of the area of a *warg* or holding, its place being taken in the accounts by a record of the bíjawari or amount of seed required.

Board sipharas .. Estates recommended for permanent remission of portions of *Tharao* assessment.

Chalgenigars .. Tenants-at-will.

Dundubhi .. .. See 'Durmati chitta.'

Durmati chitta .. An ancient (A.D. 1801) account for each *warg* showing the amount of seed required to sow it, the assessment due thereon, and the rent produce (*hutwali*).

N.B.—These accounts are notoriously inaccurate. For the Coondapoor taluk the corresponding account is the *Dundubhi* (1802) chitta, and for the Coorg máganés the *Ángirasa* (1812) chitta.

Geni warg or Sirkar geni warg. An estate which has escheated to Government, and is let out on assessment. They are now on practically the same footing as Múla wargs.

Ghar terige .. A tax similar to Nela terigé [q.v.], only that it is supposed to carry proprietary rights.

Hakkal .. .. A tax charged for dry cultivation (temporary) on ordinary village waste. If within 'kumaki' [q.v.] limits, no tax is charged on 'hakkal' cultivation, which is also free on all land, whether kumaki or not, in the Amara and Sullia máganés, which once belonged to Coorg. The rate of tax, when charge is made, is 8 annas, except in parts of Mangalore taluk, where it has for many years been As. 13–4 per acre.

Hazir hutwali .. See 'Hutwali.'

Hobli .. .. A cluster of máganés [q.v.].

Hosagame .. .. New cultivation, *i.e.*, subsequent to the commencement of the East India Company's rule.

Hutwali .. .. Produce; *Riváz hutwali*, normal rent produce; *Hazir hutwali*, actual rent produce.

Iladarvar .. .. Mortgage of land with possession.

Kadim .. .. Old cultivation, *i.e.*, prior to the commencement of the East India Company's rule.

Kambharti .. Estates unable to pay the full *tharao* assessment.

Kudutale .. .. (1) Subdivision of a *warg* made by private arrangement between parties and not formally authorised or ratified by Government officers, though entered in a register.

N.B.—When a portion of a *warg* is sold for arrears of revenue it is authoritatively divided off and numbered as a new *warg*, being entered in the accounts as 'múli' or 'géni' according to the designation of the original *warg*.

(2) The entry in the Collector's land register of the person allowed to pay such amount of assessment on a 'kudutalé' as is agreed to by the parties concerned.

Kudutaledar .. The person registered as having undertaken responsibility to pay assessment on a 'kudutalé.'

Kumaki .. .. Waste lands situated within 100 yards of cultivated lands for the provision, under

	certain restrictions, of leaf manure, pasture, fuel and timber to land-holders or cultivators. Similar lands in the Amara and Sullia máganés are termed 'Bánés.'
Kumari ..	.. Shifting cultivation by felling and burning a patch of forest and raising on the ground manured with the ashes a crop of rice or dry grains, mixed with cotton, castor, oil-seeds, &c. The tax is Re. 1 per acre of cultivation.
Magane ..	.. A group of five or six villages.
Majal (*first and second sort*).	Land capable of producing annually two crops of rice, or one of rice and one of other grain.
Majare ..	.. A hamlet.
Mogaru ..	.. Wet land growing one paddy crop; sometimes one grain crop besides.
Mouza ..	.. Chief village (kasba).
Mula wargdar	.. The proprietor of an ancestral hereditary estate. The legal position of both *Múla wargdár* and *Sirkár géni wargdár* is now exactly the same.
Mul genigars	.. Permanent tenants.
Muli warg	.. Ancestral hereditary tenure. It is the characteristic tenure of South Canara and is said by the Bombay High Court to be identical with *mirási*, *kániyátchi*, *swasthyam* and *jenmakari*.
Mul patta ..	.. A formal title-deed granted in the early years of British rule conveying to the grantee full proprietary or 'múli' rights within certain specified boundaries.
Nela terige	.. Ground-tax charged on bazaar-sites and streets in large villages or towns. Payment of this tax does not give a proprietary right.
Nettikatt ..	.. The crest of a hill adjoining cultivation; the watershed of a hill.
Patla ..	.. Wet land submerged during the heavy rains of the early months of the monsoon, and therefore growing only one paddy crop annually.
Potel ..	.. Headman of village; village magistrate.
Rekha or Shist	.. Land-tax or standard rent imposed on wargs by ancient Hindu rulers of Canara.
Rivaz hutwali	.. See 'Hutwali.'

Sarasari .. .. Literally 'average.' The term is applied to the settlement of A.D. 1819, based mainly on the average of collections during the first few years of the British administration of Canara.

Sarasari chitta (*A.D.* 1819). An account in which the *sarásari* settlement [q.v.] is recorded, together with all subsequent changes in that assessment. Also notes of any surveys, or valuations or inspections which may, from time to time, have been made.

Sarkari gudde .. Poramboke or waste at the disposal of Government.

Shamil .. .. Extra assessment added to shist [q.v.] by Muhammadan Governments in Canara.

Shanabhoga .. Village Accountant.

Shist .. .. See 'Rékha.'

Smashana .. .. Burial or cremation ground.

Tarf .. .. Sub-division of a mágané, forming the charge of a Shánabhóga [q.v.].

Taniki (*of Kambharti*). Estates whose revenues are under investigation annually.

Tharao .. .. Vulgarly *tarow*. Fixed, determined. The *tharao* or *tarrao* assessment is that of the settlement of 1819, A.D.

Ugrani .. .. Village peon.

Uttara (*land*) .. Land entrusted by a *wargdár* to a second party for some special object. (This is a private transaction.)

Vaide .. .. A sub-division of *Kambharti* estates to be advanced to the full demand of assessment by instalments.

Vaide genigars .. Tenants for a specified term of years.

Vartane .. .. Fees, perquisites, especially of grain, paid to the public servants of a village for their support. The assessment fixed on the *wargs* includes, in many cases at least, the old *vartane*.

Warg .. .. A holding or estate, not necessarily one compact block.

Wala warg .. An under *warg*. A *Wala wargdár* is responsible to the *wargdár* for payment of assessment.

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